WITTKE

STARLIGHT™ & SUPERDUTY™ OPERATOR'S MANUAL



labrie
Labrie Enviroquip Group

LABRIE LEACH WITTKE PENDPAC

WITTKE

StarLight™ & SuperDuty™

w/ Multiplexed System

Operator's manual



Liability

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November 2013

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Introduction

The purpose of this manual is to introduce operators to the operational procedures of the WITTKE™ front-loader garbage truck. For information regarding maintenance procedures, refer to the related WITTKE™ *Maintenance Manual*.

Introducing the WITTKE™

WITTKE™ units are front-load refuse collection vehicles used to pick up residential or commercial dumpsters. Once the body is full, all its content is unloaded at a waste management landfill or other appropriate site (e.g. transfer station, incinerator, recycling station). These vehicles are designed to be operated by only one person at a time, and they use a series of hydraulic, pneumatic, mechanical, and electrical systems to perform their work routine.

Product Overview

WITTKE™ units are equipped with a set of swing arms and forks to perform collection of industrial and commercial waste. Some trucks can be supplied with a carry can equipped with either a tipper or an automated arm to perform residential collection.

Figure 1-1 The WITTKE™



Body's main components are the hopper (see Figure 1-2), the packer (see Figure 1-2), the tailgate (see Figure 1-3), and the swing arms and forks (see Figure 1-3).

The hopper is the area of the body where the refuse is dumped. The packer is the piece of equipment that pushes the refuse into the body and ejects it at landfill sites. The tailgate is the rear door that prevents refuse from exiting the body during collection. At a landfill, the tailgate is raised to enable discharge of the refuse.

Figure 1-2 Hopper and packer

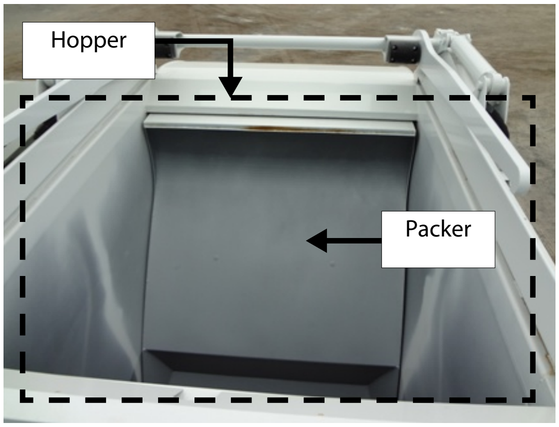


Figure 1-3 Tailgate (left); Arms and forks (right)



In the cab, you will find the control panel, the monitor, the joystick, and all the switches that control most of the truck's functions (see Figure 1-4).

Figure 1-4 WITTKE™ cab



The WITTKE™ comes in two models: the SUPERDUTY™ and the STARLIGHT™.

Key Features of the SUPERDUTY™

- Walls made up of 100% Hardox steel delivering ultimate strength at the lowest possible body weight
- Needs minimum maintenance
- Provides the lowest total cost of ownership
- Packing cycle takes a mere 18 to 20 seconds

Key Features of the STARLIGHT™

- Delivers agility without compromise
- Its low body weight maximizes the legal payload capacity
- Its fast arms cycle set at 14 seconds ensures rapid loading on the route
- Tackles both residential and commercial routes with ease

Multiplexed System

Both the SUPERDUTY™ and the STARLIGHT™ are now equipped with an electronic monitoring system called the multiplexed system.

The Multiplexed system used by Labrie is a CAN-based system that integrates a display monitor, a control panel, a joystick and three electronic controllers. This whole system has been designed to help you operate your unit in an efficient and easy way. See *Labrie's Multiplexed System* on page 43 for more details on this.

IMPORTANT: Multiplexed System-equipped WITTKE™ units must be operated *by only one person*.

To Contact Labrie Plus

In the U.S.

Address:	1981 W. Snell Road Oshkosh, WI 54904
Toll Free:	1-800-231-2771
Telephone:	1-920-233-2770
General Fax:	1-920-232-2496
Sales Fax:	1-920-232-2498
Parts and warranty:	During business hours, 7:00 AM to 7:00 PM Central Standard Time
Technical Support Service:	Available 24 hours

In Canada

Address:	175 Route du Pont St-Nicolas, QC G7A 2T3
Toll Free:	1-877-831-8250
Telephone:	1-418-831-8250
Service Fax:	1-418-831-1673
Parts Fax:	1-418-831-7561
Parts and warranty:	During business hours, 8:00 AM to 5:00 PM Eastern Standard Time
Technical Support Service:	Available 24 hours
Website:	www.labriegroup.com
E-mail:	sales@labriegroup.com

IMPORTANT: **For technical support and parts ordering, the serial number of your vehicle is required. Therefore, Labrie Enviroquip Group recommends to keep record of the information found on the VIN plate, which is located in the cab.**

2

Safety

Safety is always of prime importance when operating any type of equipment. All operators working with the WITTKE™ front-loader garbage truck must be aware of the safety practices and features detailed in this section.

Conventions

Danger!

Indicates a hazardous situation which, if not avoided, ***will*** result in serious injury or death.

Warning!

Indicates a hazardous situation which, if not avoided, ***could*** result in serious injury or death.

Caution!

Indicates a hazardous situation which, if not avoided, may result in ***minor or moderate injury.***

Basic Safety Notions

The following safety notions are related to the use of the WITTKE™. It is important to point out that the safe use of the vehicle remains the user's responsibility. He must heed all safety notions explained in this manual and on the decals found on the vehicle.

Danger!

Always be aware of the vehicle's surroundings to make sure that no pedestrians, passersby, bystanders, or other people or vehicles are in any way exposed to any danger caused by the use of the WITTKE™.

Danger!

Never get in the hopper area when the engine is running.
Only authorized personnel may do so following a lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 38).

Responsibilities

Safety is everybody's responsibility. Both employer and employee must play their part to ensure the safety of the operator, the vehicle, and its immediate surroundings.

Employer's Responsibilities

It is the responsibility of the employer:

- To ensure that the WITTKE™ is operated in accordance with all safety requirements and codes, including all applicable regulations, the Occupational Safety and Health Act (OSHA), and the American National Standards Institute (ANSI).
- To ensure that employees are qualified for operating the vehicle and its equipment, and that they all take safety measures before using them.
- To properly maintain all mobile equipment to meet all provincial/state and federal safety standards.
- To supply adequate instructions and training for the safe use of the vehicle and its equipment before assigning an employee to such vehicle.
- To keep the vehicle maintained and properly adjusted to meet the manufacturer's standards and recommendations. For help or for more information, please contact the manufacturer or any of its authorized representatives.
- To keep records of all vehicle breakdowns and malfunctions, as well as any inspection and maintenance.
- To ensure that all failures or malfunctions that may be affecting the safe use of the vehicle are repaired before the vehicle is put back into operation.
- To meet the appropriate lighting requirements for night shift work (if permitted).
- To regularly accompany the vehicle operator and take measures to ensure the smooth and safe operation of the vehicle.
- To make sure that the backup alarm works properly when the vehicle is in reverse.
- To take necessary measures to correct any damage or malfunction reported by any employee.
- To establish a "lockout/tagout" procedure and ensure its application any time inspection, repair or maintenance is performed on the vehicle, regardless of whether it takes place on the road or in the garage.

Employee's Responsibilities

It is the responsibility of the employee:

- To enforce all safety measures to meet the requirements established by the employer.
- To operate the WITTKE™ only after having received proper instructions and training.
- To perform routine daily unit inspections.
- To make sure that nobody is near the vehicle before activating any of the controls, and to be prepared to stop at any indication of possible danger.
- To immediately report any damage or malfunction of the vehicle to the employer or supervisor.

IMPORTANT: Do not use damaged equipment.

Things to Do

- Inspect the body and all systems at the beginning of each day.
- Make sure that the area is clear of any people or possible obstructions.

IMPORTANT: Be extremely cautious in areas where small children may be present.

- Wear safety glasses and footwear, gloves, and any other safety equipment when loading and packing refuse.
- Check mirrors, windows, lights, and monitor equipment are clean and adjusted properly.
- Check for explosive trash (e.g. television sets, paint cans, fluorescent light tubes, etc.).
- Use caution when driving with an unevenly distributed load.
- Inspect for overhead hazards (e.g. power lines) prior to lifting arms, hoisting body or climbing on it.
- Always use the body safety prop when servicing under the body (if truck is equipped with a service hoist system).
- Always use the tailgate safety prop before entering the area between the main body and the tailgate.
- Obey all warning and operation stickers.

Things to Avoid

- Do not operate any vehicle while under the influence of alcohol, narcotics or other intoxicants.
- Do not talk on a cell phone or listen to loud music while driving.
- Do not wear jewelry or loose clothing.
- Do not leave the vehicle before it is brought to a complete stop and work brake or parking brake is applied.
- Do not enter the hopper or main body unless the engine is shut off, the key is removed and there is an out-of-service tag on the steering wheel (see *Locking Out and Tagging Out the Vehicle* on page 38).

- Do not hoist the body on uneven ground (if unit is equipped with a service hoist).
- Do not back up the vehicle when the body is raised (units equipped with a service hoist).
- Do not drive with the tailgate fully open unless it is to unload refuse at the landfill.
- Do not use the body safety prop to prop a *loaded* body (units equipped with a service hoist).

General Precautions

Danger! Operators must adhere to the following precautions *at all times.* Failure to do so may result in vehicle and/or property damage, personal injury, or even death.

It is the employer's responsibility to ensure that *only* qualified employees are assigned to operate this vehicle.

- Read and make sure that you fully understand this manual and all safety decals before operating this vehicle. Maintenance personnel must also read and understand the Maintenance Manual for this vehicle. In case of doubt, ask a supervisor for clarifications.
- Before every work day, inspect the body, the packing system, and any system that might compromise public and/or operator safety.
- Verify that the accelerator pedal, the steering wheel, mirrors, brakes, and turn signals are in good working order.
- When driving the vehicle, keep both hands on the steering wheel at all times.
- Stop the vehicle completely and put on the parking brake before leaving the driving position.
- When the vehicle is parked, the parking brake *must* be applied.
- Before activating both arms, operators shall make sure that people and obstructions are far away from the vehicle. Operators must be able to stop these arms at all times.
- WITTKE™ vehicles are primarily designed to be operated *by only one person.* However, if Labrie Enviroquip Group customers elect to operate the vehicle with more than one worker, additional safety items shall be installed *to protect the co-worker* from hazardous situations.

IMPORTANT: In such cases, Labrie Enviroquip Group *must be informed* of every and all units that will be operated by more than one worker. Labrie Enviroquip Group will then determine and supply, at the customer's expense, the required safety items. For additional information, please contact Labrie*Plus* at 1-877-831-8250 in Canada or 1-800-231-2771 in the U.S.

- Do not operate this vehicle if there are any signs of damage or incomplete repairs.
- Report any doubts that you might have and any safety service requirements regarding this vehicle to a supervisor.
- When removing nylon locknuts, *always* replace them by new ones.
- *Never* drive this vehicle with the tailgate unlocked.

- For any work (including cleaning and inspecting) that has to be done between the body and the chassis, *always* use the body safety prop (on units equipped with a service hoist). Also, the vehicle *must* be on level ground.
- Before opening and closing the tailgate and/or raising the body, make sure that there is no one behind the vehicle.
- Do not get into the hopper compartment or try to repair anything behind the packer when it is moving or when the hydraulic pump is still running. Personnel authorized to get into the hopper *must* first lock out and tag out the vehicle, as required by the employer. For more information, see *Locking Out and Tagging Out the Vehicle* on page 38.
- *Never, under any circumstances* (maintenance or otherwise), stand underneath a *loaded* body.

Warning!

Do not operate the lifting arms until you have been fully trained, and have read and understood both the *Operator's Manual* and the *Maintenance Manual* supplied with this unit.

Warning!

Make sure that all people and obstructions are sufficiently cleared from the lifting arms before moving them. Failure to do so may result in unit and/or property damages, personal injury or death.

Warning!

Make sure there is enough clearance between raised container and overhead power lines. The lifting arms or the container must not come in direct contact with the electrical cables for the power to go through the unit. If the unit comes in contact with a power line, stay in the cab and keep away from any metal parts.

Warning!

Always retract forks and raise lifting arms before circulating with the vehicle. Failure to do so will result in unit and /or property damage, severe injury or even death.

Caution!

Always keep clean-out door closed when operating lifting arms. Otherwise, damage could occur to either hydraulic cylinder or trap door.

Caution!

Make sure the hopper roof is fully opened before lifting a container.

Fire

The employer must inform and train all personnel on the measures that must be taken in case of a vehicle and/or loaded body catching fire.

Anytime a loaded vehicle is *brought inside a garage,* fire extinguishers shall be close at hand.

The employer must also inform employees of an appropriate place to unload the body near the maintenance facility (preferably away from traffic, surface drains, and ditches).

WITTKE™ vehicles are equipped with a 5-lb fire extinguisher, which is located inside the cab. A 20-lb fire extinguisher may also be installed as an option. Each fire extinguisher must be checked regularly by qualified personnel.

Figure 2-1 5-lb fire extinguisher (left); 20-lb fire extinguisher (right)



Safety Kits

A first aid kit, a flare kit and a triangle kit are provided with the truck.

Location of Safety and Informative Decals

Pay careful attention to all safety, warning and informative decals while working in and around the WITTKE™. Keep your decals clean and in good condition at all times. For replacement decals, please call Labrie*Plus*. Decals may vary from one unit to another depending on the options and features installed on the unit. The following is an illustrated list of decals, but not limited to.

Decals on Body



84459

84458 - English/French



47304

120989 - English/Spanish

79846 - English/French



84470

84469 - English/French



93490



47268

120974 - English/Spanish

79836 - English/French



84465

84466 - English/Spanish



47282

120983 - English/Spanish
79842 - English/French



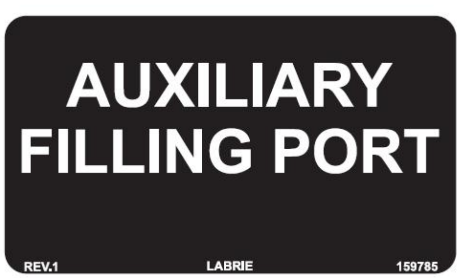
84367

84368 - English/Spanish



47422

121033 - English/Spanish
79853 - English/French

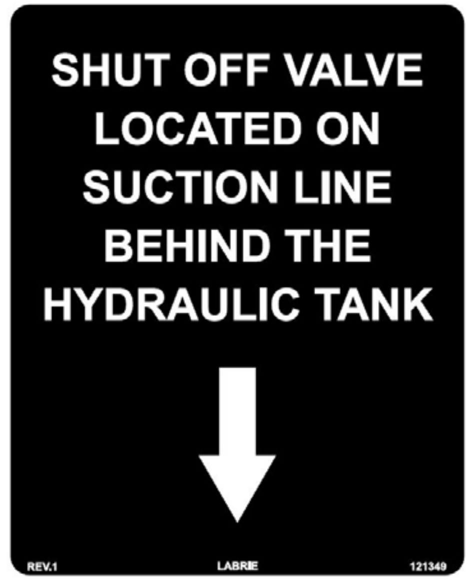


159785
Optional



84471

84472 - English/Spanish



121349



32411

Optional



47256

84419 - Spanish
159761 - French

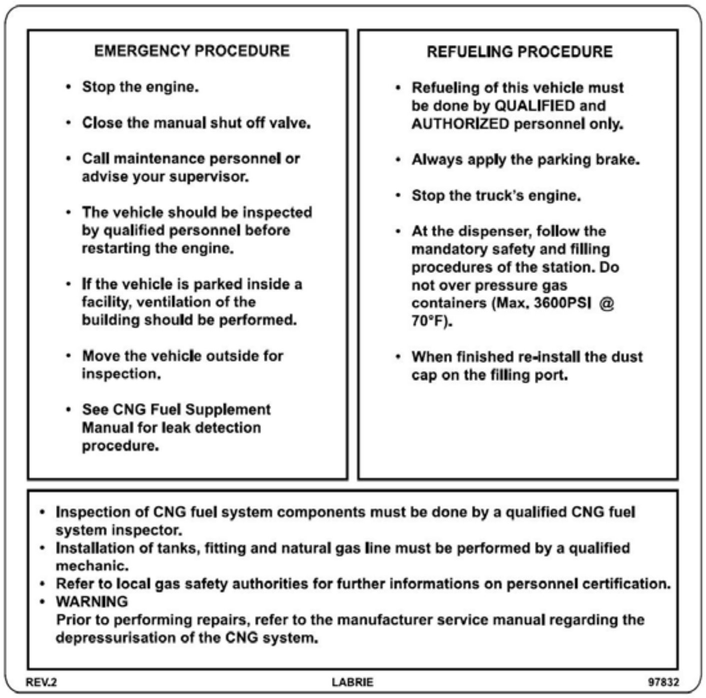
Optional



159828
Optional



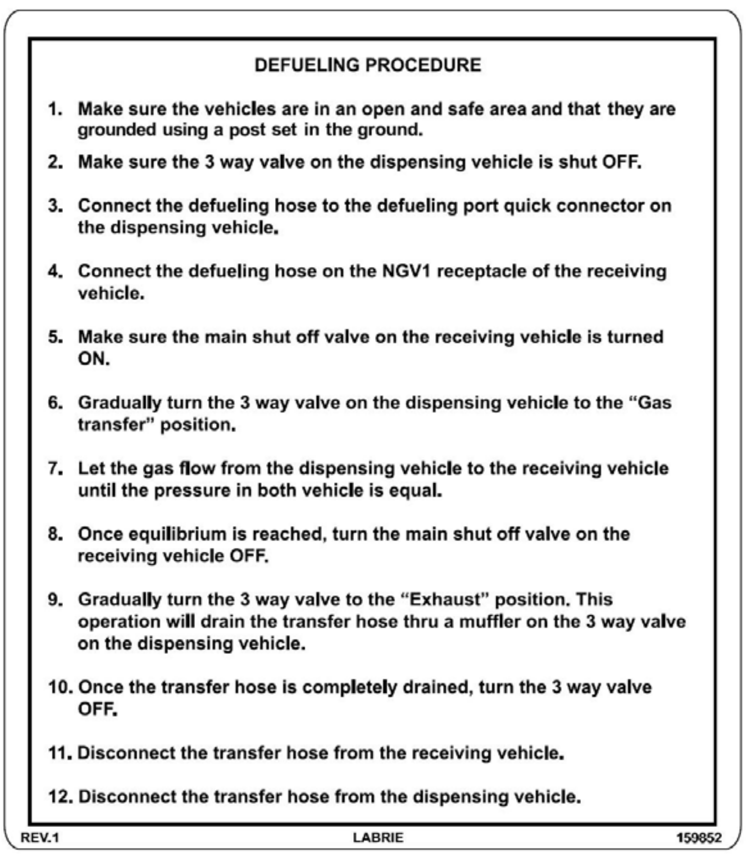
121344





97832 — 84447 - Spanish, 159759 - French — Optional

159805 — 159807 - Spanish, 159806 - French — Optional



159852
58704 - French
Optional



43817

121032 - English/Spanish
79868 - English/French

WITTKE

121235

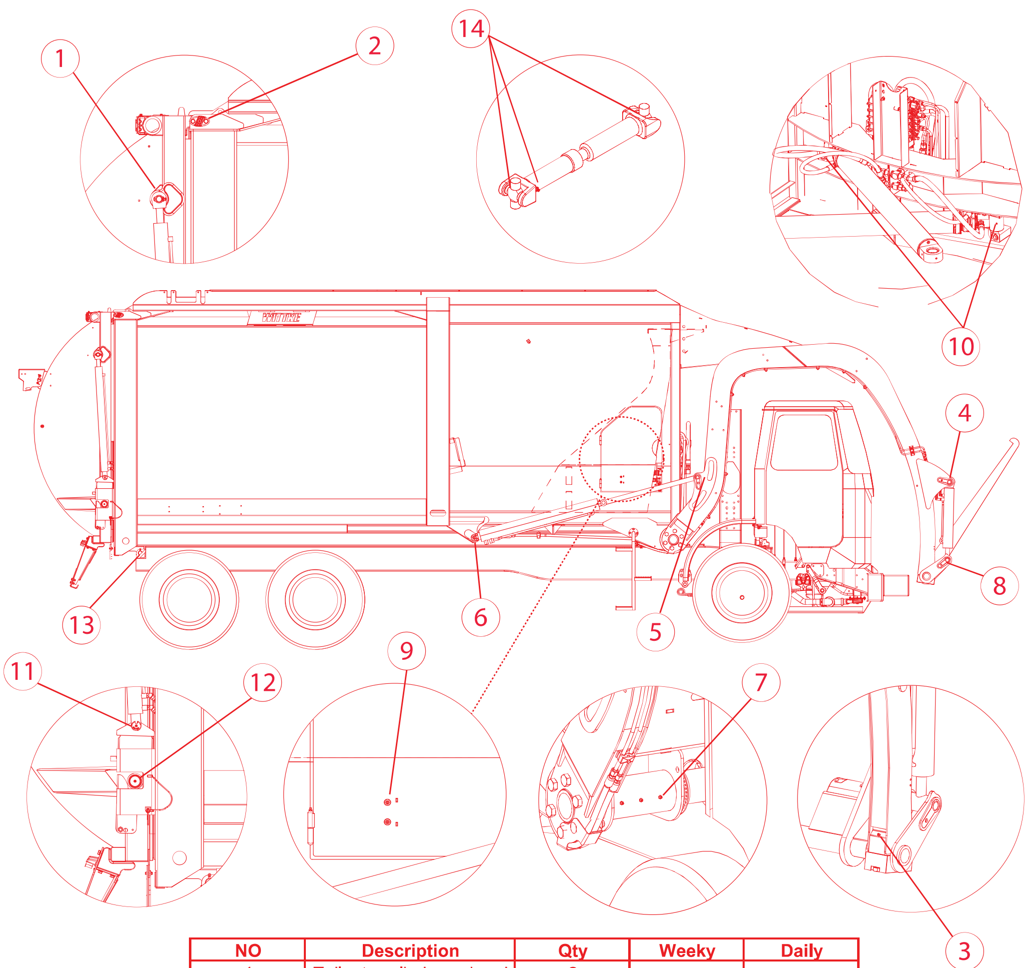
STARLIGHT X

79919
Optional

SUPERDUTY

79931
Optional

LUBRICATION CHART - WITTKE

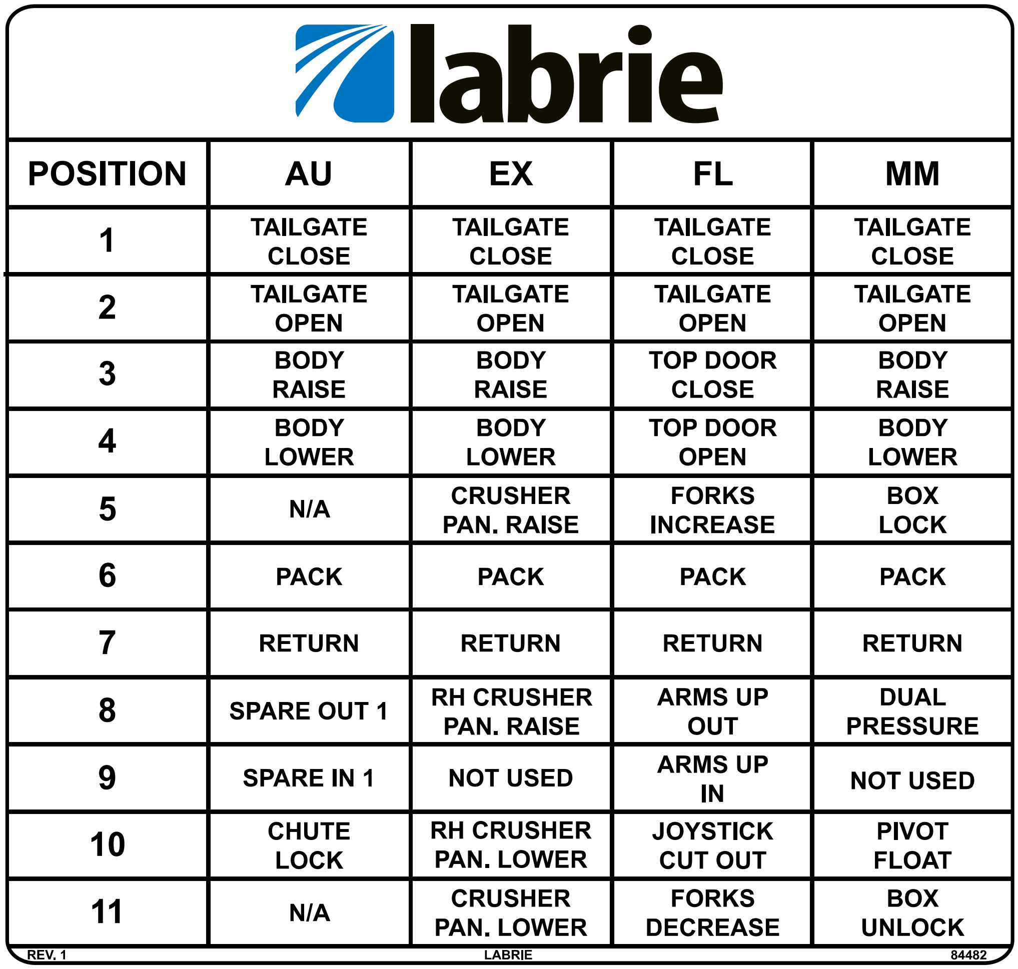


NO	Description	Qty	Weeky	Daily
1	Tailgate cylinder rod end	2	x	
2	Tailgate hinch pin	2	x	
3	Fork pillow block	2	x	
4	Fork cylinder	2	x	
5	Arm cylinder rod	2	x	
6	Arm cylinder pin	2	x	
7	Arm pivot	8	x	
8	Fork cylinder	2	x	
9	Packer cylinder pin	2		x
10	Packer cylinder pin	2		x
11	Tailgate cylinder pin	2	x	
12	Tailgate lock mechanism	2	x	
13	Body hinge	2	x	
14	Pump shaft	2		x

REV. 0 LABRIE 120557

120557

121022 - Spanish
121021 - French



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POSITION	AU	EX	FL	MM
1	TAILGATE CLOSE	TAILGATE CLOSE	TAILGATE CLOSE	TAILGATE CLOSE
2	TAILGATE OPEN	TAILGATE OPEN	TAILGATE OPEN	TAILGATE OPEN
3	BODY RAISE	BODY RAISE	TOP DOOR CLOSE	BODY RAISE
4	BODY LOWER	BODY LOWER	TOP DOOR OPEN	BODY LOWER
5	N/A	CRUSHER PAN. RAISE	FORKS INCREASE	BOX LOCK
6	PACK	PACK	PACK	PACK
7	RETURN	RETURN	RETURN	RETURN
8	SPARE OUT 1	RH CRUSHER PAN. RAISE	ARMS UP OUT	DUAL PRESSURE
9	SPARE IN 1	NOT USED	ARMS UP IN	NOT USED
10	CHUTE LOCK	RH CRUSHER PAN. LOWER	JOYSTICK CUT OUT	PIVOT FLOAT
11	N/A	CRUSHER PAN. LOWER	FORKS DECREASE	BOX UNLOCK

REV. 1 LABRIE 84482

84482

Decals on Tailgate



32411

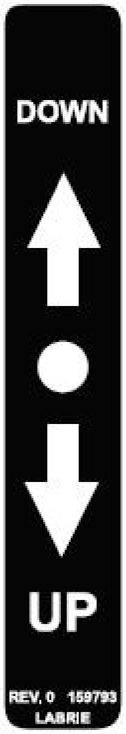
Optional



97757

97759 - English/Spanish
97758 - English/French

Decals outside Cab



159793
159794 - French

Optional



79955
79956 - French

Optional



79963
79964 - French

Optional

Decal on Lifting Arm



47310
47311 - French

Optional

Decals inside Cab



47284

120980 - English/Spanish

79843 - English/French



43850

84001 - English/Spanish

79822 - English/French



47328

120972 - English/Spanish

121013 - English/French



47330

120975 - English/Spanish

121018 - English/French



47428

120986 - English/Spanish

121036 - English/French



47831

47857 - French

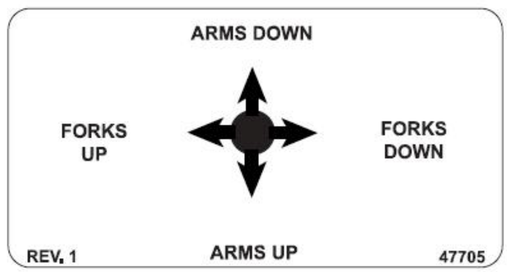


84189

84188 - English/French



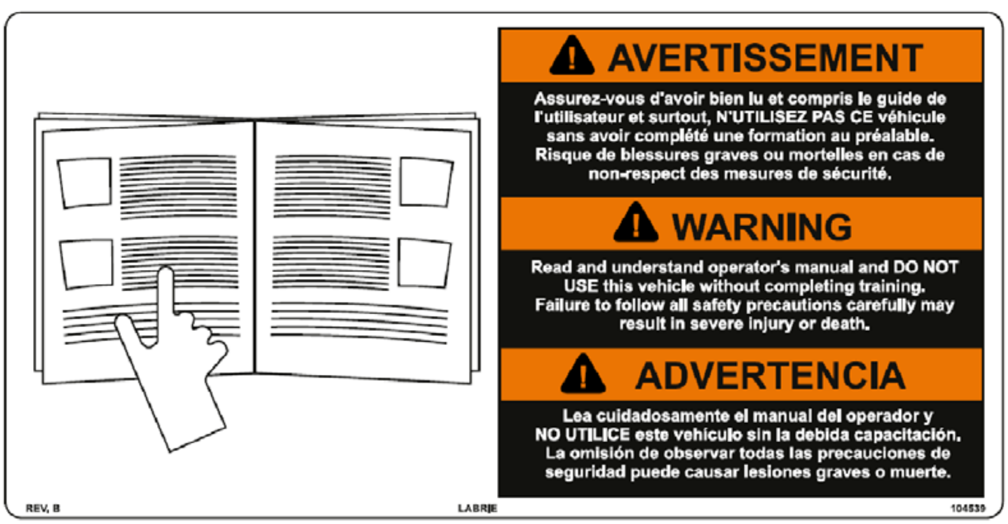
32272



47705

120994 - English/Spanish

121034 - English/French

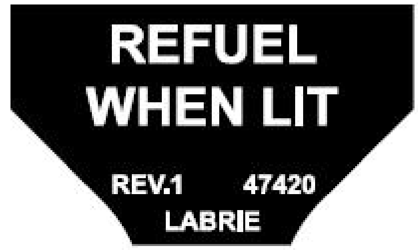


104539 84032 - English/Spanish
84031 - English/French



84367

84368 - English/Spanish



47420

84420 - Spanish
159755 - French



84325

84327 - English/Spanish
84326 - English/French

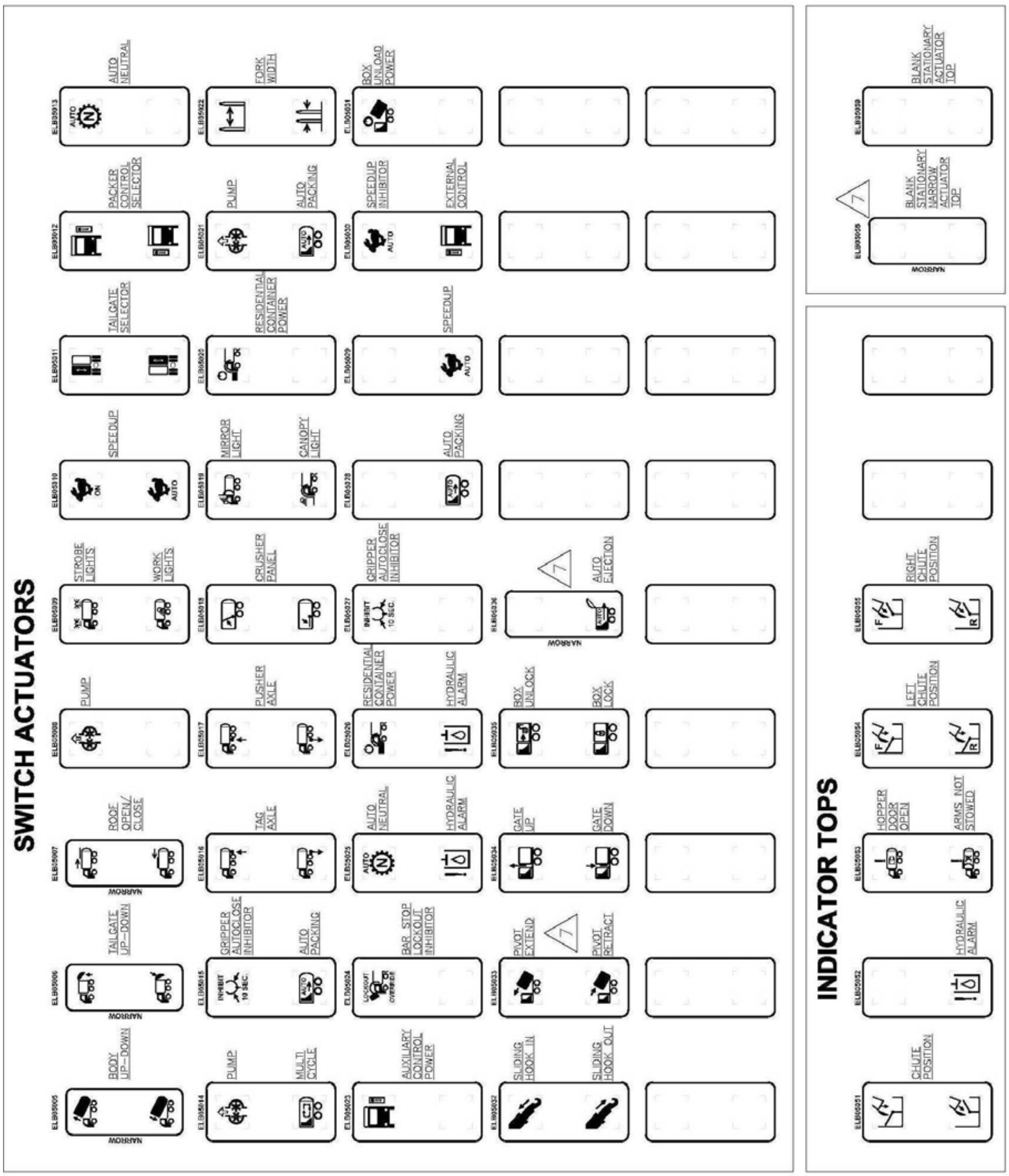


47276

84303 - English/Spanish
79840 - English/French

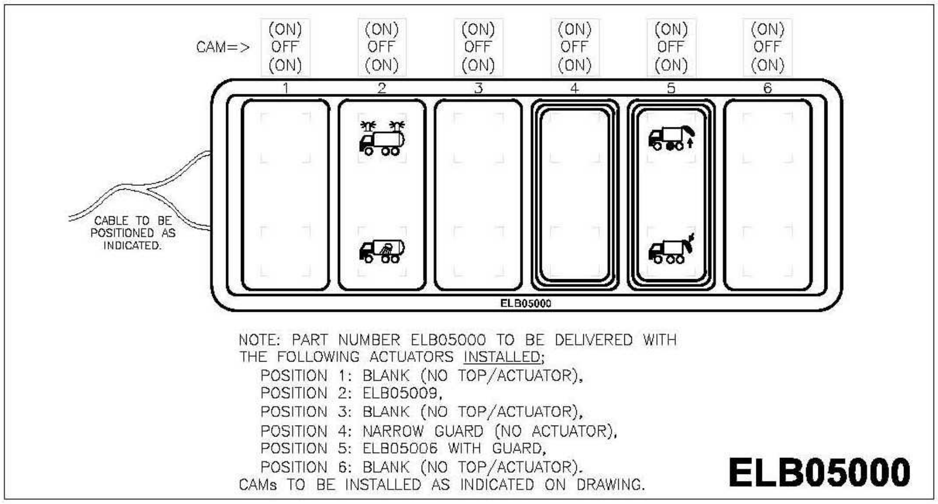
Multiplex Switch Actuators (1)

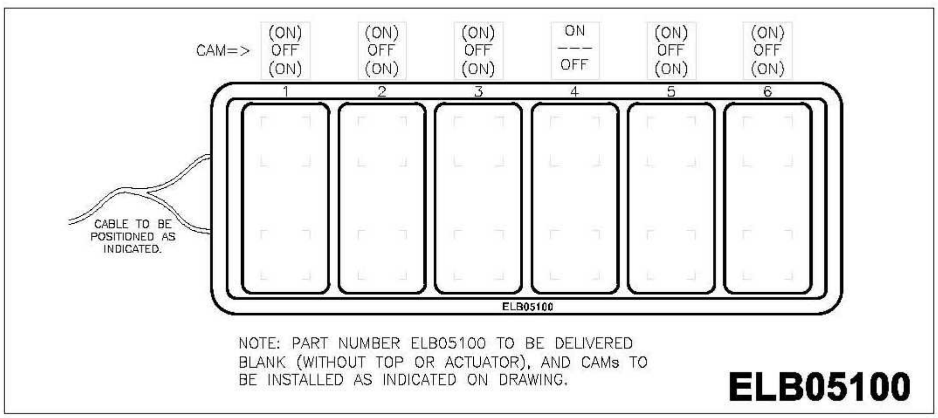
NOTE: Multiplex switch actuators and their location on the control panel vary according to the options installed on the unit.

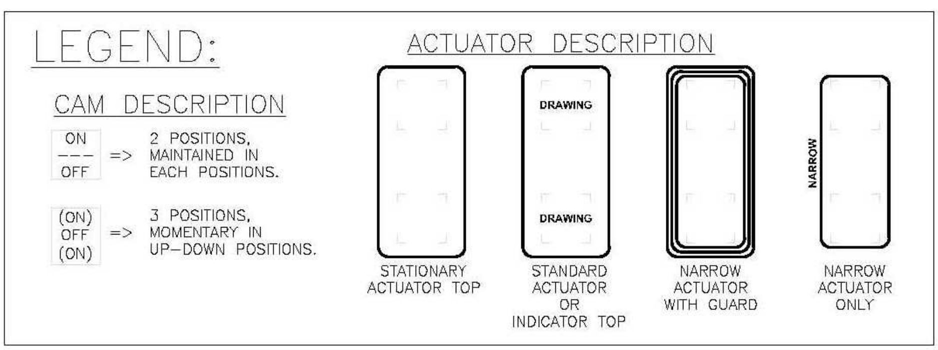


Multiplex Switch Actuators (2)

NOTE: This illustration and the preceding one were taken from the PDF file no 159535.







NOTE: 1- All symbols to be negative lens.
2- Electronic file for the symbols available on request from Labrie Enviroquip Group only.

Safety Features

Centralized Grease Block

Pins at the packer blade end of the cylinders are remotely greased via two grease fittings on the curb side back of the packer blade (see Figure 2-2). Pins at the front header end of the cylinders should be greased manually (standard) [see Figure 2-3] or via a remote greasing system located on the hopper access door (optional) [see Figure 2-4].

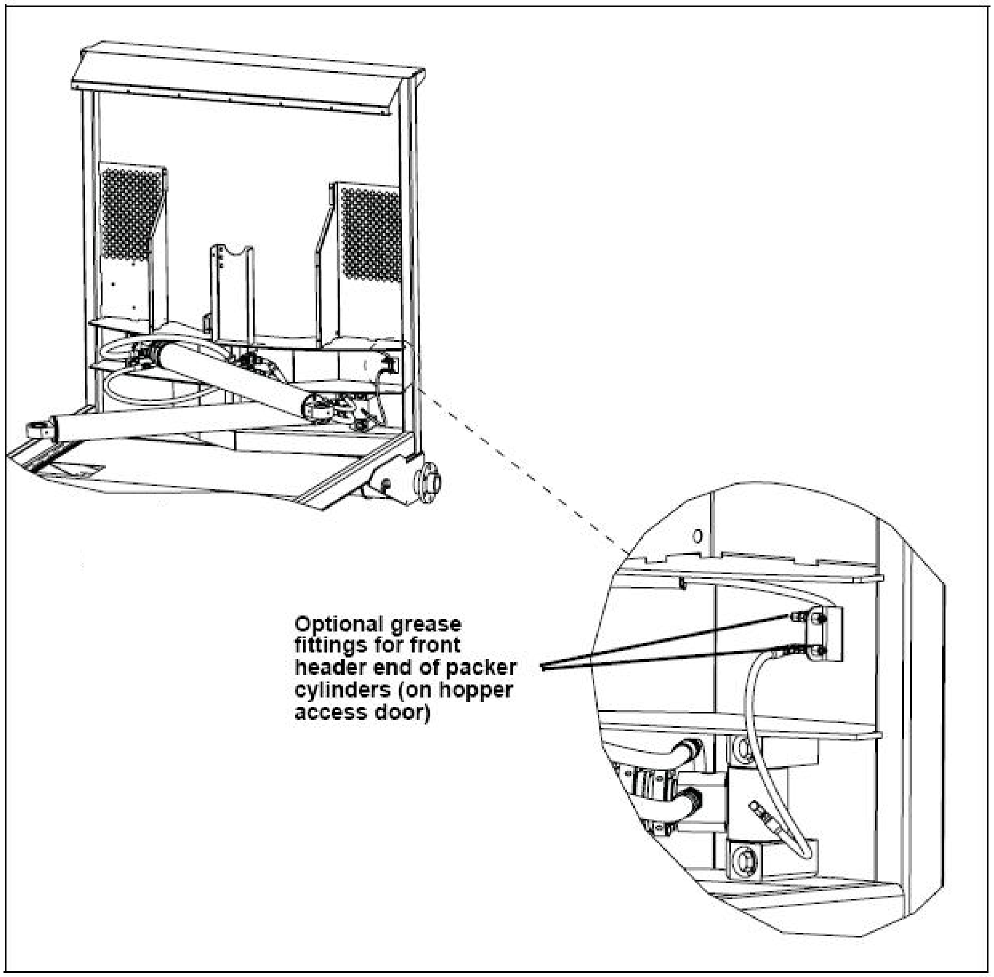
Figure 2-2 Standard grease fittings on back of packer blade



Figure 2-3 Standard manual grease fittings (front-end cylinder pins)



Figure 2-4 Optional remote grease fittings (front-end cylinder pins)



Global Motion Sensors (Optional)

These tailgate-mounted sensors set the parking brake and sound a buzzer when an obstruction is detected behind the unit. Consult the OEM for more information.

Back Up Alarm

The back up alarm sounds when the transmission is put into reverse or when the tailgate opens.

Service Hoist Safety Props (optional)

The service hoist safety props must be set when any work is performed under a lifted body. This feature comes with the service hoist option.

Safety props ensure that heavy body parts will not move inadvertently.

Warning! Always unload the body before setting the hoist safety props.

Setting the Service Hoist Safety Props

The safety props ensure that an ***empty*** body will not lower when you are working underneath it.

Danger! Always set the service hoist safety props when performing maintenance underneath a raised body. Failure to do so may result in severe injury, or even death.

Figure 2-5 Service hoist safety props



To set the service hoist safety props:

1. Make sure that there is enough clearance above the body to raise it safely and that the truck is on safe level ground.
2. Put key to "on" position without starting the truck.
3. Raise the body until both safety props can be moved into position.

   Body can be raised by pushing the hoist joystick forward (see Figure 2-6) and holding it until body reaches the desired height.

IMPORTANT: Do not raise the body higher than is required for the props.

Figure 2-6 Service hoist joystick



4. Release one of the safety props by pulling its latch towards you (see Figure 2-7), and position the prop adequately (see Figure 2-5).

   The safety prop must take place around the cylinder rod.

Figure 2-7 Prop latch



5. Release the other safety prop by pulling its latch towards you (see Figure 2-7), and position it adequately (see Figure 2-5).

   The safety prop must take place around the cylinder rod.

6. Lower the body until both safety props rest on the cylinder casings.

   Body can be lowered by pulling back the hoist joystick (see Figure 2-6) and holding it until body reaches the desired height.

7. Lock out and tag out the vehicle (see *Locking Out and Tagging Out the Vehicle* on page 38).

You can now work safely underneath the body.

Putting the Service Hoist Safety Props Back in Place

To put the service hoist safety props back in place:

1. Make sure that there is enough clearance above the body to raise it safely and that the truck is on safe level ground.

2. Put key to "on" position without starting the truck.
3. Raise the body until both safety props can move freely.

   Body can be raised by pushing the hoist joystick forward (see Figure 2-6) and holding it until body reaches the desired height.
4. Put one of the safety props back in its place. Use its latch to secure it (see Figure 2-7).
5. Put the other safety prop back in its place. Use its latch to secure it.
6. Lower the body by pulling back the hoist joystick (see Figure 2-6) and holding it until the body rests on the chassis frame.

Tailgate Safety Prop

The tailgate safety prop is used to support and keep the tailgate open during inspection or maintenance procedures. It is mandatory to set the safety prop every time the tailgate is open for such purposes.

IMPORTANT: Make sure that the body is empty before installing safety props.

Danger! The tailgate safety prop shall be set each time the tailgate is open for inspection or maintenance purposes.

Setting the Tailgate Safety Prop

To set the tailgate safety prop:

1. Make sure that the body is empty.
2. Remove the tailgate-locking mechanism safety pins.

Figure 2-8 Safety pin



3. Start the engine.

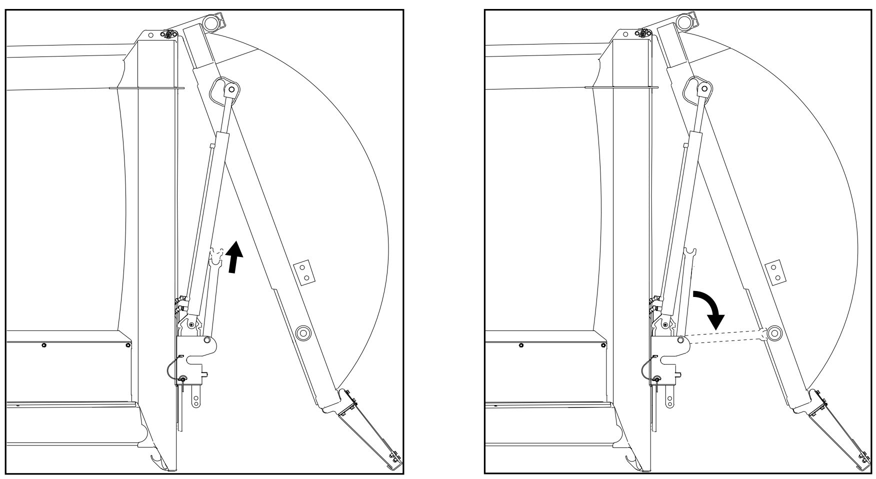
4. Turn on the pump.

Danger! Prior to raising the tailgate, make sure that no one is standing behind the vehicle and that the body is empty.

5. With the Tailgate Up Switch on the in-cab control panel, raise the tailgate about 3 feet (enough to raise the safety prop).
6. Pull the safety prop upward and set it down (see Figure 2-9).

Danger! Stand clear of tailgate path while setting the safety prop.

Figure 2-9 Pulling the safety prop upward (left) and setting it down (right)



7. Lower the tailgate onto the safety prop using the Tailgate Down Switch on the in-cab control panel.

Putting the Tailgate Safety Prop Back in Place

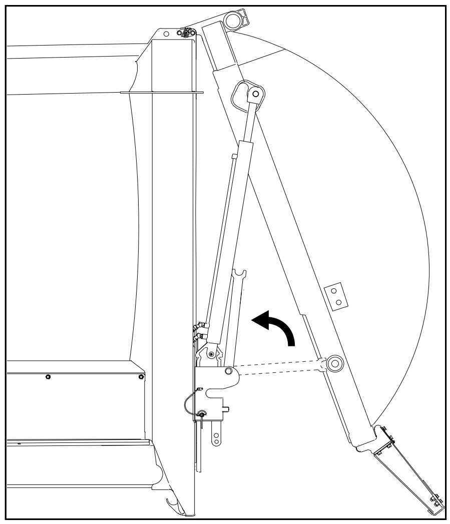
To put the tailgate safety prop back in its home position:

1. Start the engine.
2. Turn on the pump.
3. Raise the tailgate by about 3 feet.

4. Raise the tailgate safety prop (see Figure 2-10).

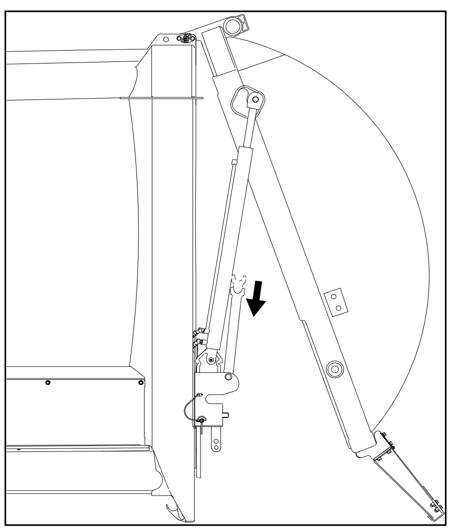
Danger! Stand clear of tailgate path while putting the safety prop back in its home position.

Figure 2-10 Raising the tailgate safety prop



5. Release your grip on the safety prop to set it in its home position.

Figure 2-11 Setting the safety prop in its home position



6. With the Tailgate Down Switch on the in-cab control panel, completely close the tailgate. The TAILGATE OPEN light indicator should turn off.
7. Put the safety pins back in place.

Securing Tailgate Safety Pins

The tailgate safety pins ensure that the tailgate can not be opened accidentally. These pins must be in place unless you are unloading refuse or servicing the tailgate. Remember these two critical points:

- Before operating the WITTKE™, secure tailgate with both safety pins (one on each side) [see Figure 2-12].
- Before opening the tailgate, remove both tailgate safety pins (see Figure 2-13).

Warning! Any vehicle with a tailgate not properly secured by a manual locking device (i.e. tailgate safety pins) is considered unsafe and may not be operated on the highway.

Figure 2-12 Tailgate safety pin in locking position



Figure 2-13 Tailgate safety pin in storage position



Camera System (optional)

WITTKE™ units can be equipped with up to four (4) cameras. The following are the locations where they can be installed on the truck: inside the hopper (Figure 2-14, left), on the tailgate center section (see Figure 2-14, right), on both sides of the tailgate (see Figure 2-15, left), and on the left-hand side mirror (see Figure 2-15, right).

The operator can switch from one camera to the other thanks to a selector switch located on the 7” LCD color monitor installed in the cab.

Refer to the camera manufacturer’s manual for more information.

Figure 2-14 Camera inside hopper (left) and on tailgate (right)

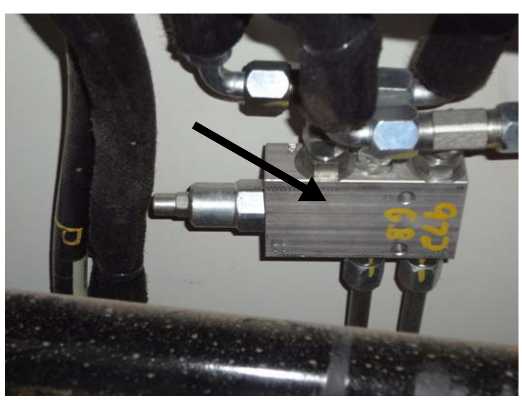


Figure 2-15 Cameras on both sides of the tailgate (left) and on the left-hand side mirror (right)



Tailgate Holding Valve

Located under the rear section of the body, this holding valve ensures that the tailgate will not open during the packing cycle.



Safety Lockout Tests

The safety lockout tests are part of your daily inspection. Successful completion of these tests ensures that your unit is safe to operate. If any of these tests fail, do not operate your unit until the appropriate adjustment or service has been completed.

IMPORTANT: Your front loader unit may be equipped with other safety lockout options not mentioned herein. Consult your supervisor and/or maintenance department if you have questions or you are in doubt.

Side Access Door Proximity Switch

Successful completion of this test ensures that the front loader Side Access Door proximity switch is working properly (see Figure 2-16). If the side access door is open, all hydraulic functions should become inoperative.

Warning! Injury or death may occur if you attempt to enter the body while the packer blade or arms are working.

Figure 2-16 Side Access Door proximity switch



For this test, proceed as follows:

1. Open the side access door.

NOTE: Some units may be equipped with a sliding door instead of a hinge-type door.

2. Ensure that the warning message "Pump: Hopper Door Not Closed" appears on the multiplex display monitor (see Figure 3-2) and that both Pump button and Hopper Door Open button on the control panel are flashing red.
3. Verify that all hydraulic functions have been rendered inoperative by activating one of the control buttons, such as the Tailgate Up button on the control panel.

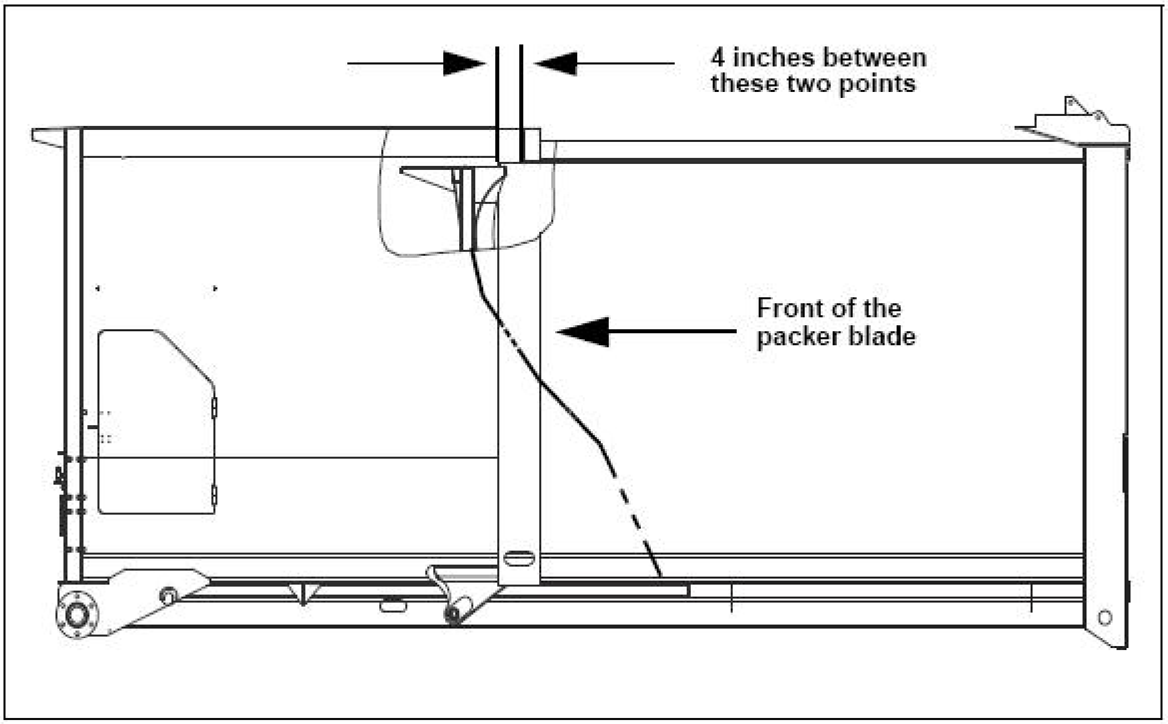
4. If the hydraulic system is still operative, the Side Access Door proximity switch may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

Packer Blade Packing Position

Successful completion of this test ensures that the packer blade does not move beyond the mid-body point during the pack cycle.

For this test, do the following:

1. Ensure the tailgate is fully closed.
2. Press the Pack button (see Figure 3-25) until the packer blade reaches the end of its stroke.
3. Press the Stop button (see Figure 3-24).
4. Check that the upper section of the packer blade is 4 inches from the mid-body breaker bar.



5. If the packer blade packs beyond that point, the packer Fully Extended proximity switch may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

NOTE: The packer blade must not pack beyond the point located 4 inches from the mid-body breaker bar, unless the tailgate is fully open. Severe damage may result.

Packer Blade Position - Tailgate Ajar

Successful completion of this test ensures that the packer blade will not complete a full eject cycle when the tailgate is not completely open.

For this test, proceed as follows:

1. Push the Tailgate Up button on the control panel until the message "Buzzer: Tailgate Unlocked" appears on the multiplex display screen and the buzzer inside the cab sounds.

NOTE: The backup alarm also sounds when the tailgate is unlocked.

Caution! Ensure body is completely empty prior to conducting this test.

Caution! Check for sufficient clearance behind the vehicle.

2. Press the Pack push button (green) on the control panel. This function should be inoperative.
3. If the packing function is still operative with the tailgate ajar, the fully open tailgate proximity switch may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

Arms Partly Raised Proximity Switch in Packing Mode (Residential Units Only)

Successful completion of this test ensures that no container will be accidentally packed when in the hopper.

For this test, proceed as follows:

1. Raise the front loader arms until the forks are above the windshield.
2. Press the Pack push button on the control panel. The packer blade should be disabled.
3. If the packer blade is not disabled, the Arms Partly Raised proximity switch (located on the right side of the arm tube) may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

IMPORTANT: The Arms Up function is disabled if the packer blade is not in its "home" position.

Arms Partly Raised Proximity Switch in Packing Mode (Commercial Units Only)

Successful completion of this test ensures that the arms will not raise above canopy if the packer is not in its “home” position.

For this test, proceed as follows:

1. Fully lower the arms.
2. Press the Pack button on the control panel.
3. Stop the packer before it reaches the fully extended position by pressing the Stop button.
4. Raise the arms.

   They should stop above canopy.
5. If the arms do not stop above canopy, the Arms Partly Raised proximity switch (located on the right side of the arm tube) may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

IMPORTANT: The Arms Up function is disabled if the packer blade is not in its “home” position.

Arms and Forks Fully Retracted Proximity Switches

Successful completion of this test ensures that the Arms Not Stowed button on the control panel turns red when the arms and forks are moved away from their parked position.

Caution! Check for sufficient clearance above the vehicle before operating both the arms and forks.

For this test, proceed as follows:

1. Lower the arms and forks.

   The Arms Not Stowed button on the control panel should become red.
2. Completely raise the arms without parking the forks.

   The Arms Not Stowed button should still be red.
3. Park the forks.

   The Arms Not Stowed button should no longer be red.
4. If the Arms Not Stowed button on the control panel is still red, the related proximity switches (one located on the left-hand side fork, the other on the left side of the arm tube) may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

Packer Fully Retracted Proximity Switch

Successful completion of this test ensures that you will not accidentally dump debris into the hopper when the packer blade is not in the "home" position.

For this test, proceed as follows:

1. Lower the front loader arms fully.
2. Press the Pack button on the control panel in order to move the packer blade off the front header.
3. Operate the Arms Up function on the joystick.

   The arms should only rise no further than the top of the cab.
4. If the arms rise past this point, the Packer Fully Retracted or Arms Partly Raised proximity switches may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

Packer Fully Extended Proximity Switch (Mid-Stroke) in Full Eject Mode

Successful completion of this test ensures that you can close the tailgate before the packer returns to its "home" position in full eject mode.

For this test, proceed as follows:

1. Fully open the tailgate.
2. Start the packer blade to perform a full eject cycle.
3. Retract the packer blade by pressing the yellow button on the control panel and close the tailgate when the packer is in the mid-stroke position.
4. If you cannot close the tailgate when the packer blade is in the mid-stroke position, the Packer Fully Extended proximity switch may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

   If you can close the tailgate before the packer blade reaches the mid-stroke position on its way back, the Packer Fully Extended proximity switch may also need to be adjusted or replaced.

Top Door Fully Open Proximity Switch

Successful completion of this test ensures that you cannot accidentally dump refuse on top of the top door.

For this test, proceed as follows:

1. Open the top door until the Top Door button on the control panel turns green.
2. Partially close the top door until the Top Door button turns blue.
3. Activate the Arms Up function on the joystick.

   The Arms Up function should not operate above cab windshield.
4. If the Arms Up function still operates above cab windshield, the Top Door Fully Open proximity switch may need to be adjusted or replaced. Refer to the *Limit and Proximity Switches* section in the *Maintenance Manual*.

Quick Reference Lockout Chart

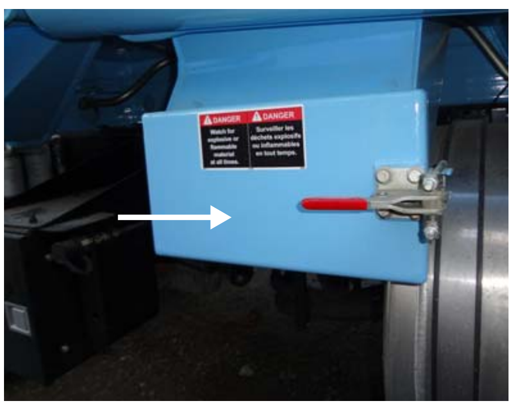
Side access door open	Pump circuit cut out - all controls inoperative
Tailgate unlocked	Pack/autopack functions inoperative
Tailgate fully open	Pack/autopack functions inoperative Full eject mode operative
Top door closed or not fully open	Arms Up function will not operate above cab windshield
Packer blade not in “home” position	Arms Up function will not operate above cab windshield

Cleanliness

Cleanliness is part of safety. Ensure that the equipment works properly by removing any compacted garbage in the packer area after each body unloading.

Clean all the lights and safety decals so you and the surrounding pedestrians and drivers will be aware of the truck at all times. Use the hoe to rake dirt out of the clean-out trap (if equipped).

Figure 2-17 Optional clean-out trap



Locking Out and Tagging Out the Vehicle

For any inspection, repair or general maintenance being done on the vehicle, whether on the road or at the shop, it is the employer’s responsibility to establish and see to the application of a proper lockout and tagout procedure.

To lock out and tag out a WITTKE™ vehicle:

1. Park the vehicle on safe level ground, and apply the parking brake (see Figure 2-18).

Figure 2-18 Parking brake sign



2. Make sure that the body is completely unloaded.
3. Switch off the hydraulic pump.
4. Turn off the engine, remove the key from the ignition, store it in a safe and controlled area (preferably on yourself), and tape over the ignition switch.
5. Turn off and lock the master switch.

IMPORTANT: The battery set of the WITTKE™ is equipped with a master switch (see Figure 2-19) that must be turned off.

Figure 2-19 Master switch



6. Chock all wheels.
7. Put an "OFF SERVICE" tag on the driver's wheel and on the front windshield.
8. Use safety props to block any system that could move by gravity (open tailgate, raised body, etc.).
9. Drain all air tanks.
10. Verify and inspect any security device and/or mechanism to make sure that there is no bypass and that they are all functional.

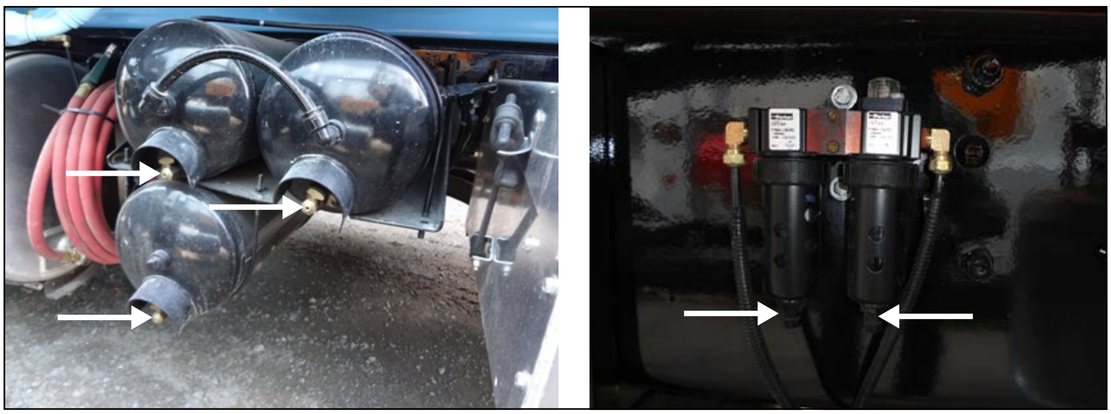
Shutting Down the Vehicle

If the vehicle has to be stored for an extended period of time, follow the chassis manufacturer's shutdown and maintenance requirements.

Also:

1. Park the vehicle on a hard level surface, and apply the parking brake (see Figure 2-18).
2. Make sure that all moving parts are in their home position (tailgate, arms, hopper, packer, etc.).
3. Turn off, in sequence, the hydraulic pump (see Figure 2-22), the electrical system, the engine and the master switch (see Figure 2-19).
4. Drain all air tanks and water trap.

Figure 2-20 Drain valves on air tanks (left) and water trap (right)

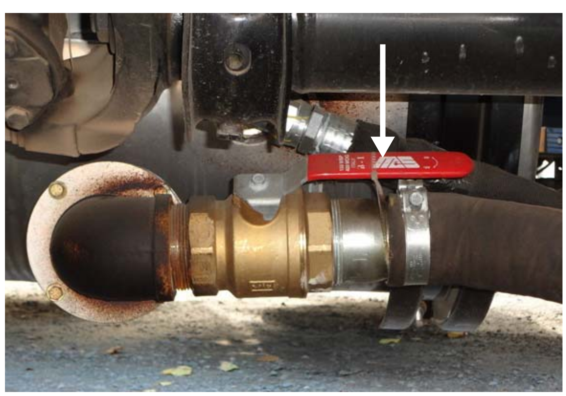


Prior to Start Up

Before starting the vehicle:

1. Make sure no system will engage and/or start to operate as you start the engine.
2. Make sure the shut-off valve on the hydraulic tank is fully open before starting the vehicle (see Figure 2-21).

Figure 2-21 Suction line shut-off valve



NOTE: The hydraulic tank model may vary according to the options installed on the vehicle.

Warning! Failure to fully open the main valve will cause immediate damage to the pump, even if the pump is turned off.

3. Engage the hydraulic system by pressing the Pump button on the control panel (see Figure 2-22).

Figure 2-22 Hydraulic pump ON/OFF button



Once the engine is started, wait for air pressure to build up to *at least* 70 psi.

Figure 2-23 Air pressure indicator



IMPORTANT: Do not operate or move the vehicle until air pressure has reached 70 psi.

3 Controls and Indicators

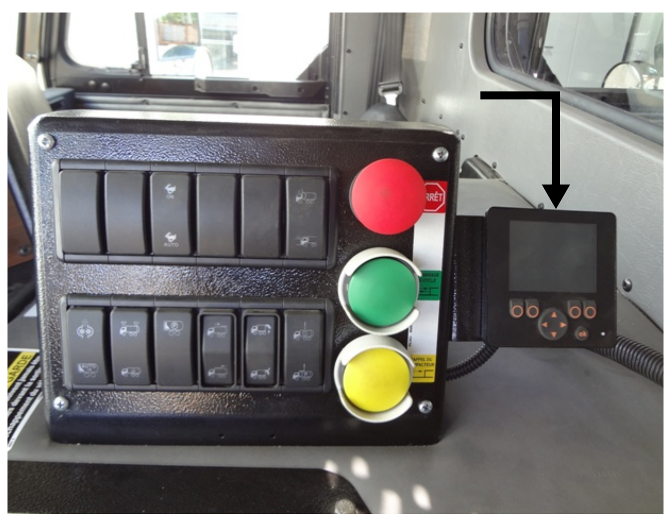
The WITTKE™ has a series of controls and indicators that allow easier operation of the different functions that come with the vehicle. These controls and indicators are mainly located on the in-cab control panel and on the dashboard.

Labrie's Multiplexed System

Labrie has equipped your WITTKE™ unit with a CAN bus-based multiplexed system, which integrates a display monitor, a control panel, a joystick, and a set of electronic controllers. This whole system has been designed to help you operate your unit in an efficient and easy way. Labrie's multiplexed system is reliable and safe, and it requires less wiring harnesses to operate. It can also monitor various function status of the body and display warning and caution messages.

Through its display monitor (see Figure 3-1), Labrie's multiplexed system informs you of any malfunction that may occur during use of the truck. Various caution and warning messages can be displayed on the monitor, depending on the seriousness of the situation. Messages in yellow blocks indicate that caution should be used; messages in red blocks indicate a warning situation that must be dealt quickly.

Figure 3-1 Display monitor



Each time the operator turns the ignition key on, a complete bit test of the multiplexed system is conducted. This test takes about 5 seconds to complete.

NOTE: A flashing green light on the monitor indicates that the display power is on. This light should be blinking steadily at 2 Hz during normal operation. If it blinks at a faster rate, it is a sign of a problem with the monitor. A flashing red light on the monitor is also a sign of a problem. Call Labrie*Plus* for support.

The logo of Labrie Enviroquip Group appears momentarily on the display monitor at the start of the system (see Figure 3-2).

Figure 3-2 Labrie logo on the display monitor



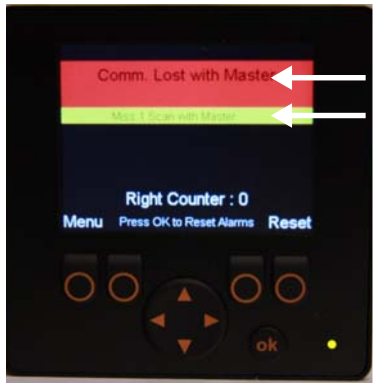
NOTE: If the Welcome Screen with the Labrie logo stays on continuously, there may be a communication problem between the monitor and the master control module. Report this problem to the maintenance personnel.

NOTE: The display monitor works even if the engine is not started. All it needs is electrical power. However, if you start the engine, the monitor will reboot to reflect the changes caused by the starting of the truck.

Warning and Caution Messages

On the display monitor, messages in yellow blocks indicate that caution should be used and messages in red blocks indicate a warning situation that must be dealt quickly.

Figure 3-3 Warning and caution messages on monitor



See Table 1 for a list of warning and caution messages. Please note that this list is not exhaustive.

Table 1 Warning messages

Warning and Caution Messages	Solution
ArmRaise:AirWeigh Signal	Unload Body
ArmRaise:Packer Not Retracted	Retract Packer
ArmRaise:Roof Not Opened	Open Roof (Top Door)
Auto-Dump: Wrong Driver Position	Change Driver Position Switch to Correct Position
Auto-Dump:Arm Too High to Start	Lower Arms
Auto-Dump:Max Angle Reached	Operate Arms and Forks Manually
Auto-Dump:Pump Not Running	Engage Pump
Bar Stop Reached	First Push Bar Stop Override Switch, then Move Container out of Bar Stop
Buzzer:Body Raised	Lower Body
Buzzer:TailGate Unlocked	Lock Tailgate
Control is External	Disable External Control
ESTOP:Aux Emergency Stop	Pull Up Aux EStop Button
ESTOP:Cab Emergency Stop	Pull Up Cab EStop Button

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
ESTOP:Ext Emergency Stop	Pull Up Ext EStop Button
Fork:Arm Above MidHeight	Lower Arms Below MidHeight
Fork:Pump Not Started	Engage Pump
High Hydraulic Oil Temp	Turn Off Engine and Refer to Maintenance Personnel
J1939:Network NOT OK	Call Labrie*Plus*
Low Hydraulic Oil	Add Hydraulic Oil
Miss 1 Scan with Master	Refer to Maintenance Personnel or Labrie*Plus*
Packer:Arm Above MidHeight	Lower Arms Below MidHeight
Packer:Pump Not Started	Engage Pump
Packer:Roof Not Opened	Open Roof (Top Door)
Pump Stop:Main Air Pressure	Let the Air Build Up to Required Pressure
Pump:Auto-Dump Button ON	Call Labrie*Plus* (Button Must be OFF to Engage Pump)
Pump:Aux EStop	Pull Up Aux EStop Button
Pump:Cab EStop	Pull Up Cab EStop Button
Pump:Deadman Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:Ext EStop	Pull Up Ext EStop Button
Pump:Fork Width Decr. Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:Fork Width Incr. Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:Hopper Door Not Closed	Close Hopper Door
Pump:Main Air Pressure	Let the Air Build Up to Required Pressure
Pump:Packer Extend Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)

Table 1 Warning messages (cont'd)

Warning and Caution Messages	Solution
Pump:Packer Retract Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:PTO Not OK	Refer to Maintenance Personnel or Labrie*Plus*
Pump:Roof Open Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:RoofCloseSwitchON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:RPM too High	Engine Must Be at Idle Speed to Engage Pump
Pump:SpeedUpAuto Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:SpeedUpON Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:TagAxle Down Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:TagAxle Up Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:TailGate Down Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:TailGate Up Switch ON	Call Labrie*Plus* (Switch Must be OFF to Engage Pump)
Pump:Trans. Not OK	Refer to Maintenance Personnel or Labrie*Plus*
Roof:Pump NOT Started	Engage Pump
Service Oil Filter #1	Replace Oil Filter #1
Service Oil Filter #2	Replace Oil Filter #2
TailGate:Packer Not Retracted	Retract Packer
TailGate:Pump NOT Started	Engage Pump
Wrong Driver Position	Move Driver Position Switch to Opposite Position

Table 2 Error messages

Error Messages	Solution
Button Pack 12 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Button Pack 13 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Button Pack 14 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Button Pack 15 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
CAN Error Level 1	Refer to Labrie*Plus*
CAN Error Level 2	Refer to Labrie*Plus*
CAN Error Level 3	Refer to Labrie*Plus*
Comm. Lost with Master	Refer to Maintenance Personnel or Labrie*Plus*
Module 11 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 11 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 25 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 25 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 30 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 30 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 50 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*

Table 2 Error messages (cont'd)

Error Messages	Solution
Module 50 not Connected	Refer to Maintenance Personnel or Labrie*Plus*
Module 60 is disconnected	Refer to Maintenance Personnel or Labrie*Plus*
Module 60 not Connected	Refer to Maintenance Personnel or Labrie*Plus*

Should the system issue a warning or a caution message, it will appear on the Main page.

For example, if the following caution message "Pump Not Started: Main Air Pressure" is issued by the system, it will appear on the Main page of the display monitor. An action that could be taken by the operator, when faced with such a situation, would be to wait until the required main air pressure level is reached.

For a specific problem or condition that requires special attention, the multiplexed system can alert the operator to a possible cause, which appears in bold and in large print on the monitor screen (active cause). The operator should check if the problem stems from the highlighted or active cause. One possible cause is highlighted at a time. What is shown in light and small print in the lower part of the screen are causes that have already been dealt with (see Figure 3-4).

Figure 3-4 Example of a possible cause



NOTE: If the system detects a problem, a beep will sound and a message will appear on the display monitor.

NOTE: To go back to the Main page or the Main Menu, press "Esc" as many times as necessary until the desired page is displayed.

Hydraulic Oil Temperature Indicator (optional)

This optional indicator, when provided, shows you the current hydraulic oil temperature. This indicator is found on the upper right-hand side corner of the screen.

Time and Date Indicator

A time and date indicator may be found on the upper left-hand side corner of the screen. The availability of this indicator is based on the chassis on which the body is mounted. If the chassis provides real-time clock information through the J1939 bus, time and date will appear on the screen. To set the Time and Date indicator, go to the Main Menu and choose Time Adjust.

Main Menu

To access the Main Menu, press the far left button when the Main page is displayed.

When the Main Menu is displayed, you can have access to the following sections:

- I/O Status
- Program Version
- Pump Usage (optional)
- Auto-Dump (optional)
- Time Adjust (available according to chassis)

Displayed in the lower center of the screen is an indicator that monitors traffic on the network. This indicator is called Network Load, and it shows values that reflect such traffic.

NOTE: The higher the network load value is, the heavier the traffic is on the network. Also, the lower the network load value is, the less the traffic is on the network.

To exit this page and return to the Main page, press “Esc”. To choose a section from the Main Menu, highlight the desired section using the up/down arrows and press the “OK” button.

I/O Status

In this section, you will find helpful information to troubleshoot body-related problems that you may face during your day-to-day tasks. These problems can be of any nature, from hydraulic to mechanical, electrical or pneumatic.

Select the control module corresponding to the part of the truck that needs to be checked.

For example, if you want to check all functions that are found in the cab, choose module #10. For all functions that pertain to the chassis, choose module #20, etc.

To choose a particular module, use the up/down arrows to select it and press “OK”.

NOTE: Pressing “OK” can be done two ways: either press the far right button or the “OK” button.

Press “Esc” to return to the preceding page.

Figure 3-5 Module I/O Status page



Input Status

The Input Status page is accessible from the Module I/O Status page. After selecting the desired module and pressing "OK", the Input Status page of the selected module is displayed (see Figure 3-6).

Figure 3-6 Input Status page



The Input Status page contains a set of rectangles. Each of these rectangles represents input elements, which in turn correspond to a particular function of the truck. For example, if you select rectangle I00, a short description appears in the lower part of the screen, which indicates that this rectangle relates to the input element coming from the service brake pressure switch.

NOTE: Each rectangle is numbered and relates to a specified function of the truck. However, for a given number, the related function may vary from truck to truck.

Table 3 Colored rectangles

Rectangles (inputs)	Function Status
Blue	Inactive
Green	Active

Press “Esc” to return to the preceding page.

Press the “Output” button to display the Output Status page.

Output Status

The Output Status page is accessible from the Input Status page (see Figure 3-7).

Figure 3-7 Output Status page



The rectangles found in this page are used to check the status of different outputs.

NOTE: Each rectangle is numbered and relates to a specified function of the truck. However, for a given number, the related function may vary from truck to truck.

Table 4 Colored rectangles

Rectangles (outputs)	Function Status
Blue	Inactive
Green	Active
Red	Closed short-circuit
Yellow	Open circuit

Press “Esc” to return to the preceding page.

Press the “Force” button to display the Force page.

NOTE: To go back to the Main page or the Main Menu, press “Esc” as many times as necessary until the desired page is displayed.

Force

The Force page is accessible from the Output Status page. Just press the corresponding button to access the Force page.

But before the Force page is displayed, a warning message appears on the screen (see Figure 3-8).

Figure 3-8 Warning message



This message stays on for 15 seconds. Then an "OK" prompt appears on the lower right-end corner of the screen.

IMPORTANT: It is very important to read this message completely before accessing the next page.

Figure 3-9 Warning message w/ "OK" prompt



Press "OK" to go to the Force page or "Esc" to return to the preceding page.

After pressing "OK", the Force page appears on the screen.

Figure 3-10 Force page (input)



As no input function can be forced to be active or inactive, the operator must press the "Output" button to go to the following page (see Figure 3-11).

Figure 3-11 Force page (output)



The Force page allows the operator to force a function to be overridden, that is, to make an inactive function active and an active function inactive.

This page contains a set of rectangles. Each of these rectangles is numbered and corresponds to a specific function of the truck.

Colors are used to indicate whether the corresponding function is active or not:

- a blue rectangle means the corresponding function is inactive
- a green rectangle means the corresponding function is active

Also:

- a red rectangle means there is a closed short-circuit
- a yellow rectangle means there is an open circuit

A white-bordered rectangle means that this rectangle is selected. Use the directional arrows to select a specific rectangle or function. When a rectangle is selected, a short description of the corresponding function appears in the lower part of the screen.

After selecting a rectangle:

- press "ON" to activate the corresponding function (rectangle turns blue to green)
- press "OFF" to deactivate the corresponding function (rectangle turns green to blue)
- press "RESET" to have the software control the status of the corresponding function

NOTE: To go from a module to another (e.g. from module 10 to 20), the operator has to go back to the Module I/O Status page (see Figure 3-5) and select module 20.

Press "Esc" to return to the preceding page.

J1939

The J1939 page is useful when you need some specific information (e.g. current gear, road speed, brake).

Figure 3-12 J1939 page



Your vehicle is equipped with 2 different CAN-based communication buses:

- the **J1939 bus**, which is used for the chassis equipment; and
- the **CANopen bus**, which is used for the body.

These 2 communication buses are completely independent of one another, except for some specific data that are transferred from the chassis J1939 bus to Labrie's multiplexed system in order to be used by this system. These specific data are the following:

- selected gear
- current gear
- road speed
- engine RPM
- brake
- parking brake

Press "Esc" to return to the preceding page.

Module Software Version

In this section, you will find the software version currently used by each of the modules installed on the truck and by the master control module.

Figure 3-13 Program Version page



Press "Esc" to return to the preceding page.

Pump Usage (optional)

This section contains an optional hour meter that tracks pump usage for maintenance purposes.

Press “Esc” to return to the preceding page.

Auto-Dump (optional)

This section is used to reset both fork and arm potentiometers, which are part of the Auto-Dump system. Before resetting, make sure the forks and arms are in their “home” position, then follow the instructions shown on the display monitor. For more information, call Labrie*Plus* (see *To Contact Labrie Plus* on page 4).

Press “Esc” to return to the preceding page.

Time Adjust

This section allows you to set the Time and Date indicator.

Press “Esc” to return to the preceding page.

NOTE: To go back to the Main page or the Main Menu, press “Esc” as many times as necessary until the desired page is displayed.

Control Panel

The control panel is located in the middle of the cab for easy access during collection and operation. Here is a description of all the controls and switches found on the control panel.

Figure 3-14 Control panel (part 1)



Figure 3-15 Control panel (part 2)



NOTE: The switches and controls that are on the control panel vary according to the options installed on the vehicle.

Pump Switch

This switch (see Figure 3-14), also known as PTO switch, engages and disengages the hydraulic pump, all the body functions (packer, tailgate) and the joystick that controls the arms.

- Press the switch to activate the hydraulic pump (switch turns green).

- Press the same switch again to deactivate the hydraulic pump (switch turns blue).

NOTE: If a safety interlock (e.g. due to access door not closed) stops the hydraulic system from running, the pump switch flashes red and the message "Pump: Hopper Door Not Closed" appears on the display monitor.

NOTE: Do not close the main shut-off valve on the hydraulic tank even if the PTO switch is turned off. The pump is always turning whatever the engine RPM. It is very important not to let the pump run dry or without oil. Otherwise, the pump will be seriously damaged or even destroyed.

Figure 3-16 Main shut-off valve



IMPORTANT: In case of a leak in the hydraulic system, and if the vehicle has to be driven somewhere else, take off the drive shaft between the pump and the engine. Call maintenance facility and refer to the Maintenance Manual.

Tailgate Up Switch

This control switch (see Figure 3-15) is used to raise the tailgate. Press and keep down this switch to raise the tailgate to the desired height.

Before using this switch, make sure that the truck is parked on a safe level ground.

IMPORTANT: Remove both tailgate-locking pins before using this switch.

Warning! Do not drive the vehicle when the tailgate is not fully closed.

NOTE: When the tailgate is unlocked both the in-cab buzzer (see Figure 3-17) and the backup alarm will start sounding off. A red warning light, located at the center of the buzzer, will also blink.

NOTE: **Each time the tailgate is unlocked, the message "Tailgate Unlocked" appears on the display monitor.**

Figure 3-17 Buzzer with red warning light



NOTE: **If the upward movement of the tailgate is stopped at any position except the fully open position, both Tailgate Up and Tailgate Down switches will flash red.**

NOTE: **When the tailgate reaches the fully open position, the Tailgate Up switch will turn green while the Tailgate Down switch will turn blue.**

Tailgate Down Switch

This control switch (see Figure 3-15) is used to lower the tailgate. Press and keep down this switch to completely close and lock the tailgate or to lower it until it rests on the tailgate safety prop.

IMPORTANT: **When the tailgate is completely closed and locked, put both tailgate-locking pins back to their place.**

NOTE: **If the downward movement of the tailgate is stopped at any position except the fully closed and locked position, both Tailgate Up and Tailgate Down switches will flash red.**

NOTE: **Each time the tailgate is unlocked, the message "Tailgate Unlocked" appears on the display monitor.**

NOTE: **When the tailgate is locked back, both the in-cab buzzer (see Figure 3-17) and the backup alarm will stop sounding off. The red warning light, located at the center of the buzzer, will also stop blinking.**

NOTE: When the tailgate is completely closed and locked, the Tailgate Down switch will turn green while the Tailgate Up switch will turn blue.

Mirror Light Switch (optional)

This switch (see Figure 3-14) turns on/off the light that is fixed above the left-hand side rearview mirror if installed on your vehicle.

- Press the switch once to turn on the mirror light (switch turns green).
- Press the switch again to turn off the mirror light (switch turns blue).

Figure 3-18 Mirror light



Canopy Light Switch (optional)

This switch (see Figure 3-14) turns on/off the canopy light if installed on your vehicle.

- Press the switch once to turn on the canopy light (switch turns green).
- Press the switch again to turn off the canopy light (switch turns blue).

Strobe Light Switch (optional)

This switch (see Figure 3-15) turns on/off the strobe light if installed on your vehicle.

- Press the switch once to turn on the strobe light (switch turns green).
- Press the switch again to turn off the strobe light (switch turns blue).

Work Light Switch (optional)

This switch (see Figure 3-15) turns on/off work lights if installed on your vehicle.

- Press the switch once to turn on work lights (switch turns green).
- Press the switch again to turn off work lights (switch turns blue).

Auxiliary Controls Switch (optional)

Auxiliary controls, if installed on your unit, are located outside, directly behind the cab on the street side (see Figure 3-19). For these controls to be enabled, the operator must press the Auxiliary Controls switch on the control panel (see Figure 3-20).

- A green switch means these controls are enabled.
- A blue switch means these controls are disabled.

Auxiliary controls include a dual handle joystick (see Figure 3-19) to operate both the forks and the arms and a packer control station to operate the packer (see Figure 3-19). A throttle advance switch (or speed-up) is also provided to speed up the packing process and the raising/lowering of the arms (see Figure 3-19).

Figure 3-19 Auxiliary controls

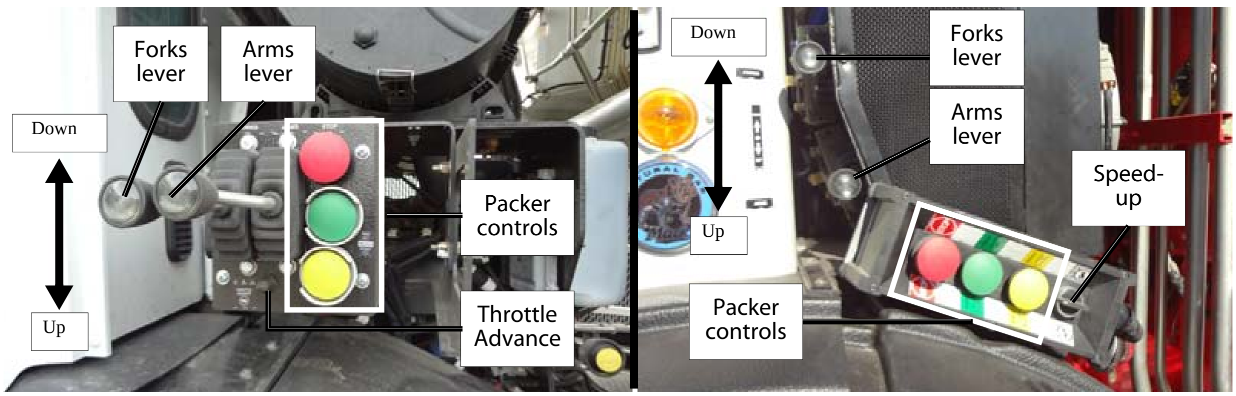


Figure 3-20 Auxiliary control switch



Auto-Packing Switch (optional)

The auto-packing switch (see Figure 3-14) enables the packer to automatically start cycling when the arms pass the canopy on their way down.

- Press the switch to initiate the automatic packing cycle (switch turns green).
- Press the switch again to disable this feature (switch turns blue).

Forks Width Switches (optional)

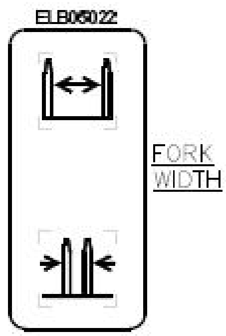
These optional switches (see Figure 3-21) allow the operator to either increase or decrease the width between both forks.

- The upper switch is used to increase the width between both forks.

  Press this switch and keep it pressed until the desired width is reached.
- The lower switch is used to decrease the width between both forks.

  Press this switch and keep it pressed until the desired width is reached.

Figure 3-21 Forks width switches



NOTE: If this optional feature is available on your unit, these switches are located on the control panel.

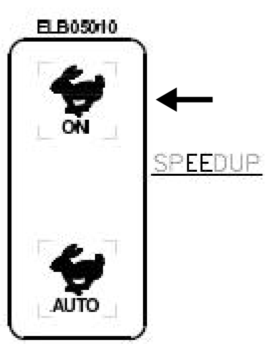
Speed-Up Switches (optional)

These switches (see Figure 3-14) engage/disengage the optional speed-up feature which is used to increase the engine speed up to 1500 RPM whenever a pack or an auto-pack cycle is initiated.

- The upper switch is used to engage the speed-up function which increases the engine speed to 1500 RPM until disengaged.

  Press this switch to engage the speed-up function (switch turns green).

Figure 3-22 Speed-up "ON"



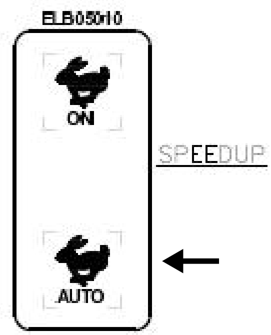
Press this switch again to disengage the speed-up function (switch turns blue).

NOTE: The unit transmission must be in neutral before this speed-up switch can be turned on.

- The lower switch is used to activate the auto setting for the speed-up function and increase the engine speed up to 1500 RPM during packing and auto-packing cycles.

  Press this switch to engage the “AUTO” speed-up function (switch turns green).

Figure 3-23 “Auto” speed-up



Press this switch again to disengage the “AUTO” speed-up function (switch turns blue).

NOTE: The unit transmission must be in neutral before this speed-up switch can be turned on.

Top Door Switches (Roof Open/Roof Close)

Located on the control panel, these switches (see Figure 3-15) are used to open/close the top door.

NOTE: The top door must be fully open to dump refuse into the hopper.

- The upper switch is used to open the top door.

  Press this switch and keep it pressed until the top door is completely open. Once the top door is fully open, the switch turns green. Refuse can now be dumped into the hopper.
- The lower switch is used to close the top door.

  Press this switch and keep it pressed until the top door is completely closed. When the top door is fully/partially closed, both Top Door switches are blue.

IMPORTANT: Dumping refuse into the hopper with the arms and forks can only be done when the upper switch is green-lighted.

Packer Retracted Indicator Light

This indicator light is located on the in-cab control panel (see Figure 3-15).

- If this indicator light is green, this indicates that the packer is completely retracted.
- If this indicator light is red, this indicates that the packer is not completely retracted.

NOTE: The packer must be completely retracted to allow dumping into the hopper.

Hopper Door Open Indicator Light

This indicator light is located on the in-cab control panel (see Figure 3-15).

- If this indicator light is green, this indicates that the hopper door is closed.
- If this indicator light flashes red, this indicates that the hopper door is not closed.

NOTE: No hydraulic function is possible when the hopper door is not closed. In such a situation, the pump switch on the control panel (see Figure 3-14) also flashes red.

Arms Not Stowed Indicator Light

This indicator light is located on the in-cab control panel (see Figure 3-15).

- If this indicator light is green, this indicates that the arms and forks are adequately stowed.
- If this indicator light is red, this indicates that the arms and forks are not adequately stowed.

IMPORTANT: Never drive this vehicle when this indicator light is red-lighted.

In-Cab Packer Control Station

The WITTKE™ has a packer control station located on the cab console. Here is a description of the three buttons found on the packer control station.

Stop Push-Button (red)

The Emergency Stop button (see Figure 3-24) will stop all hydraulic functions on the truck (tailgate, packer, etc.). By pressing the red button, the packer will stop where it is. The red button has to be manually pulled back to reactivate the hydraulic system.

Figure 3-24 Stop push-button



Pack Push-Button (green)

This push-button moves the packer blade to the rear of the hopper when you are packing a load or to the rear of the body when you are ejecting a load at the landfill.

- Press this button once to activate the packer blade (tailgate must be closed and locked). When the tailgate is closed and locked, the packer returns automatically to the “home” position.
- Press and hold this button to eject the load (tailgate must be fully open).
- Release this button to stop the packer blade during the ejection (full eject mode only).

Figure 3-25 Pack push-button



Retract Push-Button (yellow)

This push-button (see Figure 3-26) returns the packer blade to its “home” position when you are packing a load or you are ejecting the load at the landfill.

- Press this button once to bring the packer blade back to the front-end of the hopper (tailgate must be closed).
- Press and hold this button to bring the packer blade back to its “home” position during the ejection cycle (tailgate must be open).

- Release this button to stop the packer when it comes back to its “home” position (full eject mode only).

Figure 3-26 Retract push-button



Joystick Controls

In-Cab Joystick

Located on the console at the center of the cab, this pneumatic joystick (see Figure 3-27) controls both the arms and forks. The joystick operates at 90° and 45° angles. As a result, you can perform two functions at the same time. For example, you can lower the arms and forks simultaneously.

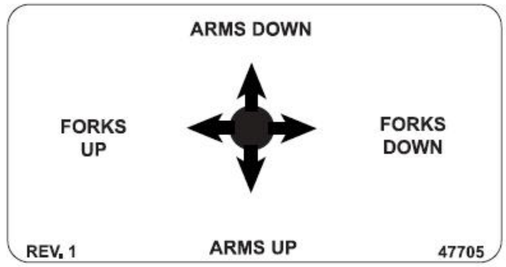
Figure 3-27 In-cab joystick



- Shift the joystick forward to lower the arms only.
- Shift the joystick to the position between the Arms Down and Forks Down to lower both the arms and forks (see Figure 3-28).
- Shift the joystick to the left to lift the forks only (see Figure 3-28).
- Shift the joystick to the position between the Forks Up and Arms Up to raise both the forks and arms (see Figure 3-28).
- Shift the joystick backward to raise the arms only.

- Shift the joystick to the right to lower the forks only.

Figure 3-28 Joystick functions



Outside Dual Lever Joystick (optional)

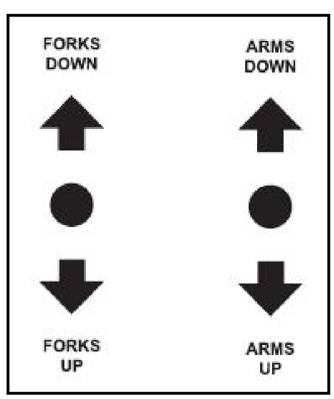
This optional pneumatic joystick uses two levers to control the arms and forks; the right-hand lever controls the arms and the left-hand lever controls the forks. While these are separate controls, you may still perform two functions at the same time. For example, you can lower the arms and forks simultaneously.

Figure 3-29 Dual lever joystick



- Shift the Fork control downward to raise the forks.
- Shift the Fork control upward to lower the forks.
- Shift the Arm control downward to raise the arms.
- Shift the Arm control upward to lower the arms.

Figure 3-30 Dual lever joystick functions

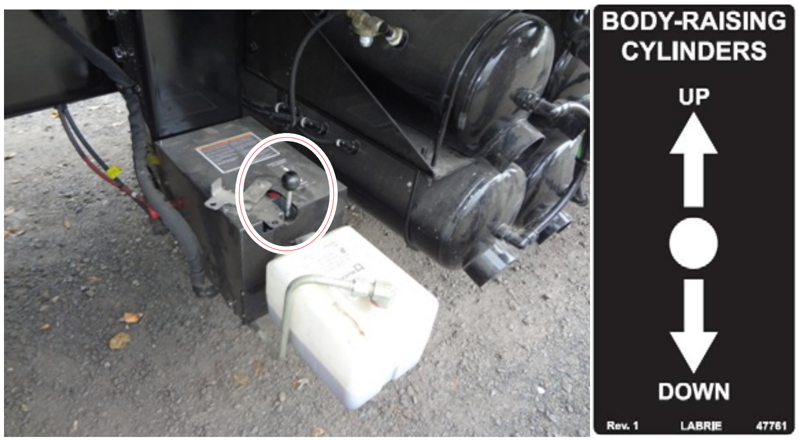


Service Hoist Lever (optional)

This lever controls the two hydraulic cylinders that raise and lower the body for maintenance on the body and chassis.

- Pull the lever backward to raise the body.
- Pull the lever towards you to lower the body.

Figure 3-31 Service hoist lever



Warning! Always use both hoist safety props when working under a raised body and never prop a loaded body. Failure to do so may result in severe injury or even death.

Figure 3-32 Hoist safety props



Cab Dashboard

The following is a description of the controls and buttons found on the dashboard.

Parking Brake

The parking brake must be used every time the WITTKE™ is stopped on idle position other than the regular traffic stops (see Figure 3-33).

Figure 3-33 Parking brake



4

Operating the WITTKE™

The different methods, procedures and necessary actions to operate the WITTKE™ are presented in this section.

Warning! Always read and understand the *Operator's Manual* before operating the unit.

Before operating the WITTKE™, the operator must be completely familiar with all safety procedures, and the location, operation and functions of all controls and indicators related to the operation of the unit.

You must complete the daily inspection before starting the vehicle. It is your responsibility to report any malfunctions or concerns to your supervisor and maintenance personnel.

Consult with your supervisor for specific rules of driving the WITTKE™.

Obey all speed restrictions and regulations.

Daily Inspection

Approaching the Vehicle

As you approach the vehicle, look for any object under or against the vehicle and check the surroundings for people, other vehicles, as well as ground and overhead obstructions. Ensure that the truck is parked at the most convenient place where you will have all the clearance required to perform a complete start-of-the-day inspection. During the daily inspection, look for any structural damage. Inspect tires and check the hydraulic tank for air leaks.

Visual Inspection

Before starting the vehicle, the operator MUST perform a visual inspection of the truck.

Tasks to be performed during daily visual inspection:

- Ensure the engine is not running and the parking brake is set.
- Ensure the cleanliness of lamps, safety decals, camera lenses, mirrors, windows, and the vehicle in general.
- Ensure that safety equipment is present (i.e. fire extinguisher, first aid kit).
- Ensure there is no structural damage.
- Ensure that body mounts to chassis are tight and that there are no cracks on it or on the structure around it.
- Ensure that there is no unusual wear, distortion, cracking, leaning, leaking on the vehicle.
- Ensure that hydraulic oil level (sight gauge on tank) is as recommended (cylinders must be collapsed).
- Ensure that the hydraulic cylinders do not leak, and ensure mounting pins are secure.
- Ensure the hydraulic tank shut-off valve is fully open.
- Ensure there are no mechanical problems: structure, rollers, hinges, door locks, wear items, etc. Report any defective system to maintenance personnel.
- Ensure there are no leaks, cracks or other types of problems on the frame area, fuel tank, hydraulic tank, air tanks (air tanks must be drained every day), cleaning trap and wheels.
- Ensure the tailgate is fully closed and locked, BOTH tailgate safety pins are in place and rollers are on main locking pins.

Once the visual inspection is over, you must start the engine to check if the systems are working properly.

Starting the Vehicle

To start the WITTKE™:

1. Before starting the engine, check the following items:
   - 1 a. Transmission shifter is on neutral.
   - 1 b. Parking brake is on (see *Parking Brake* on page 69).
   - 1 c. Hydraulic system is off (see *Pump Switch* on page 57).
2. Start the vehicle as stated in the chassis manufacturer's manual.
3. Switch **ON** the pump to engage the hydraulic system (the air pressure has to be at a minimum of 70 psi). See Figure 3-14.
4. Turn on all light switches.
5. If required, move the truck to an appropriate area to perform daily inspection.
6. Report any defective system to the maintenance personnel.

Body Inspection Procedure

Exit the cab to continue your inspection. Bring a rag along to clean all accessible lights, labels, camera lenses, etc. Check for mechanical problems: rollers, hinges, door locking mechanisms, wear items, etc. Report any defective system to the maintenance personnel.

Body inspection procedure:

1. Check the side access door (or hopper door) for proper latching (see Figure 4-1).

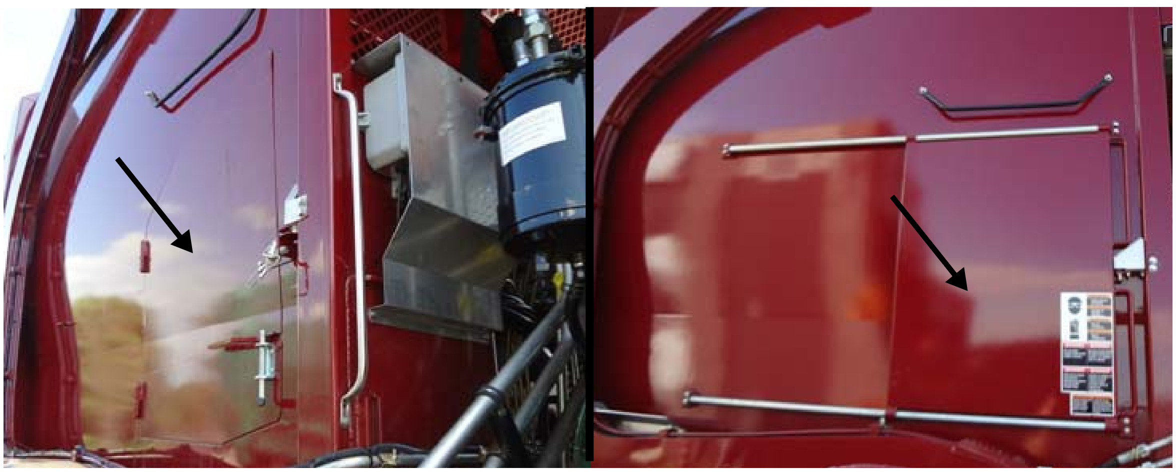
NOTE: When the side access door is open, the hydraulic pump is disabled. This door MUST be closed for the hydraulic pump to function.

Danger!



Never attempt to reach inside the hopper area while the packer is in motion. Severe injury or death may occur.

Figure 4-1 Hinged side access door (left); Sliding side access door (right)



2. Go back in the truck and open the top door completely.

Figure 4-2 Top door



3. Press the green push-button on the in-cab packer control station (see Figure 3-25) to activate the packer for a full cycle.
4. Use the joystick on the in-cab console (see Figure 3-27) to check for proper operation of the arms and forks.

5. Check if the tailgate safety pins are in place. If they are not then you need to put them in place to lock the tailgate properly.
6. As you walk along the side of the truck, clean all safety decals.
7. Check the frame area, fuel tank and air tanks (air tanks must be drained every day), cleaning traps and wheels for leaks, cracks or other type of problems.
8. At the front end, check lights and mirrors.
9. Go around and check lights, clean camera lenses, decals, lights, etc.
10. Check for hydraulic leaks.

Arm Inspection Procedure

On a daily basis, perform a visual inspection of the lifting arms and forks, looking for leaks, cracks or premature wear of the moving parts. Refer to the *Lubrication* section in the *Maintenance Manual* for detailed greasing points.

Figure 4-3 Lifting arms and forks



Danger! Do not stand directly in the path of the arm while performing the inspection.

Warning! Apply the lockout/tagout procedure at all times. See *Locking Out and Tagging Out the Vehicle* on page 38.

Apply the following inspection procedure:

1. Make sure to park the vehicle on a safe level ground.
2. Start the engine and engage the hydraulic pump (see *Pump Switch* on page 57).
3. Fully lower both lifting arms and extend both forks as shown in Figure 4-3.

4. Turn off the hydraulic pump (see *Pump Switch* on page 57) and the engine.
5. Ensure that the parking brake is applied and the vehicle is tagged out for maintenance purposes (see *Locking Out and Tagging Out the Vehicle* on page 38).
6. Perform a visual inspection of the following items:
   - cylinders





   - pivots





   - mounting bolts

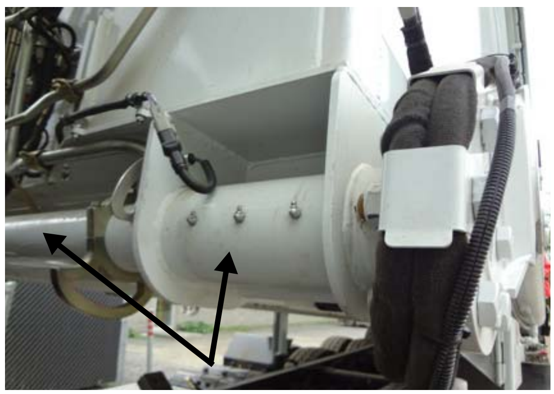


   - Hoses and connections





- Check for loose nuts and bolts
- Torque tube support and shaft



- Check proximity switches for proper operation. Refer to *Maintenance Manual*.

Inspection Sheet

The following is an example of an inspection sheet. The operator MUST follow the inspection sheet provided by his employer. If the employer does not have any, ask for his permission before using this example sheet.

VEHICLE CONDITION REPORT

Date: ________________ Unit: ______________________________

Driver: ___________________ Demo: ____________________

Engine Hrs in: ______________ Engine Hrs out: _________________

Mileage in: ________________ Mileage out: ___________________

Start Time: ___________________________ Finish Time: ___________________________

FLUID LEVELS

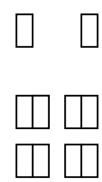
PRE	POST		Amount Added	PRE	POST		Amount Added
☐	☐	Engine Oil	Qt. _______	☐	☐	Fuel	Gal. ________
☐	☐	Hydraulic Oil	Qt. _______	☐	☐	Transmission	Qt. _________
☐	☐	Coolant	Qt. _______	☐	☐	Water	Qt. _________

CAB INSPECTIONS

If items need repair, check below and describe.

PRE	POST		PRE	POST	
☐	☐	All gages/gage lights	☐	☐	Cab horn
☐	☐	Low oil pressure	☐	☐	Exterior back-up horn
☐	☐	Low oil warning light/buzzer	☐	☐	Windshield cracks
☐	☐	Seat and seat belt	☐	☐	Windshield wipers
☐	☐	Clutch free play (Juggler)	☐	☐	Heat/Defrost
☐	☐	License/registration papers	☐	☐	Reflective triangles
☐	☐	Service brakes adjusted	☐	☐	Steering play
☐	☐	Parking brakes operational	☐	☐	Radio
☐	☐	Low air warning light/buzzer	☐	☐	Camera
☐	☐	Air compressor adequate			

TIRES
Indicate any defects.



VISUAL BODY WALK-AROUND

PRE	POST		PRE	POST		PRE	POST	
☐	☐	Battery disconnect	☐	☐	Electrical wiring	☐	☐	Compactor working
☐	☐	Body damage	☐	☐	Fire Extinguisher	☐	☐	Hydraulic leaks
☐	☐	Cab damage	☐	☐	Fuel tank/lines	☐	☐	Hydraulic pressure
☐	☐	Air lines	☐	☐	Exhaust	☐	☐	Hydraulic hoses
☐	☐	Air compressor	☐	☐	Engine	☐	☐	Wheel/Rims
☐	☐	Air dryer	☐	☐	Starter	☐	☐	Seals
☐	☐	Head lights	☐	☐	Turn signal	☐	☐	Transmission
☐	☐	Marker lights	☐	☐	Camera	☐	☐	Mirrors
☐	☐	Brake lights	☐	☐	Cable/Hooks	☐	☐	Radiator
☐	☐	Suspension	☐	☐	Arm	☐	☐	Safety devices
☐	☐	Hopper clean	☐	☐	Body clean	☐	☐	Safety decals
☐	☐	Tailgate	☐	☐	Packer	☐	☐	Cart tipper
☐	☐	Safety Interlock switches						

PRE	POST	
☐	☐	No Defects – Vehicle Condition Satisfactory

DEFECT DESCRIPTION

____

____

____

____

☐ Above defects corrected

☐ Above defects need not be corrected for the safe operation of vehicule.

Signature	Date
DRIVER'S SIGNATURE	**DATE**
DISTRIBUTOR SIGNATURE	**DATE**
DRIVER'S REVIEW SIGNATURE	**DATE**

Mechanic's Comments :

Right-Hand Side Driving Position (optional)

If your unit is equipped with a right-hand side driving position, the following general procedure must be followed when you need to change driving positions.

Before you operate your front-loader using the optional right-hand side driving position, take the time to read the chassis manufacturer's manual so that you can exactly know what you have to do. Also, check with your supervisor for regional rules about speed and safety restrictions.

When changing driving positions, follow these steps (general procedure):

1. Stop the vehicle and set the parking brake.

Warning! Set the parking brake before leaving the cab for an extended period of time or when stopping on an incline. Do not rely on work brake.

2. Turn off the hydraulic pump (see *Pump Switch* on page 57).
3. Move to the desired driving position (LH or RH).
4. Shift the OPERATING POSITION switch to the desired position (LH or RH).

Figure 4-4 OPERATING POSITION switch



5. Adjust mirrors and monitor to the chosen driving position.
6. Start the engine.
7. Turn on the hydraulic pump (see *Pump Switch* on page 57).

Warning! Use the parking brake when leaving the cab for an extended period of time rather than the right-hand side work brake (if equipped). Consult the chassis OEM.

8. Adjust the front loader arms to a position suitable for travel to the next stop.

Position of the Lifting Arms

Residential Collection Mode (optional)

For this type of refuse collection, a carry can (see Figure 4-5) is attached to the lifting arms of the front loader unit.

Figure 4-5 Carry can



To correctly position both lifting arms and the carry can:

1. Lower the arms so that they rest directly on the two front craddles that are fixed to the bumpers.

Figure 4-6 Front craddles



2. Adjust the forks so that the carry can is horizontal or tipped slightly toward the cab.

3. Raise the carry can enough to clear any dips or bumps on the road as you drive.

NOTE: For specific information on the use of the carry can, refer to the carry can manufacturer's manual.

Warning! Always maintain optimum visibility of the road and always be aware of your increased need for front clearance.

NOTE: Switch the hydraulic pump to OFF if your route destination is more than 1 mile (1.6 km) away.

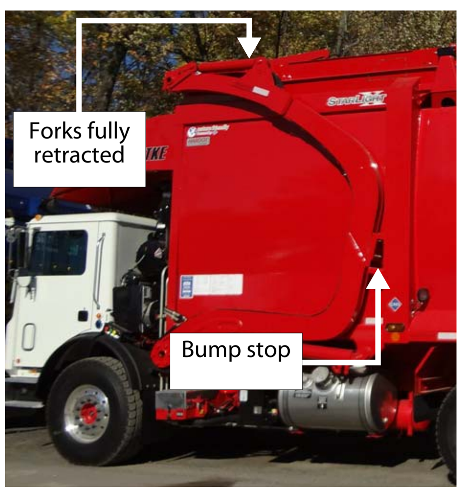
NOTE: Regardless of model, the arms can be raised to the top of the window during the pack cycle. This allows the operator to move the carry can to clear obstructions when moving the vehicle during a pack cycle.

Commercial Collection Mode

To correctly position the arms between two pick-ups:

1. Raise the arms until they rest on the rubber bump stops.
2. Retract the forks fully.

Figure 4-7 Arms correctly positioned



En Route

Consult with your supervisor for specific rules of driving the front loader in your location.

Please remember the following important points:

- The tailgate MUST be fully closed with tailgate safety pins in locking position.

- Obey speed restrictions and regulations if driving from the right-hand side.

Overheight Caution

In some locations, the front loader may be overheight when the arms are in the full up travel position. Consult local regulations or confer with your supervisor if unsure.

NOTE: Before passing under an overpass, be aware of the required clearance.

Commercial Units when not in Collection Mode

To correctly position the arms, do the following:

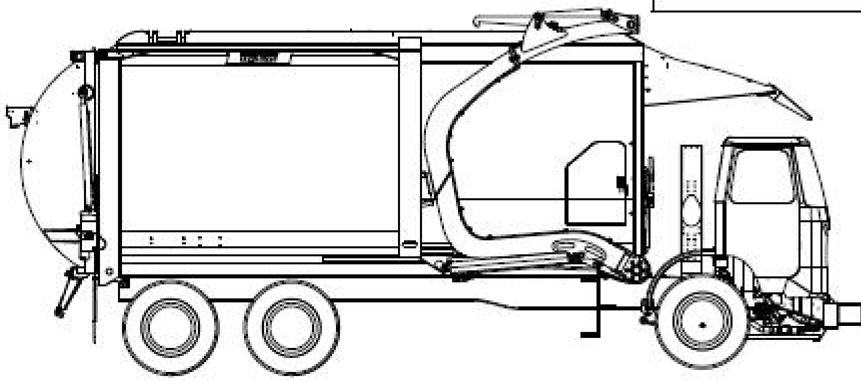
1. Raise the arms until they rest on the rubber bump stops (see Figure 4-8).

Figure 4-8 Rubber bump stop



NOTE: Be aware of the required overhead clearance at all times.

2. Retract the forks fully until the Arms not Stowed indicator light on the console panel turns green (see Figure 3-15).
3. Close the top door (see *Top Door Switches (Roof Open/Roof Close)* on page 63).
4. Turn off the hydraulic pump (see *Pump Switch* on page 57) to reduce the engine load between stops.



NOTE: Switch the hydraulic pump to OFF if you route destination is more than 1 mile (1.6 km) away.

Residential Units when not in Collection Mode

Driving a residential front loader when it is not in collection mode requires some special considerations:

- Be aware of the required overhead clearance at all times.
- The carry can is carried inside the hopper during travel. As a result, you must allow adequate room in the hopper for the carry can during travel.
- Never close the top door with the carry can inside the hopper. Serious damage will result.

To correctly position the arms, do the following:

1. Perform the Arms Elevated Proximity Switch test (Refer to "Arms Partly Raised Proximity Switch in Packing Mode (Residential Units Only)" on page 35).
2. Raise the arms until they rest on the rubber bump stops (see Figure 4-8).
3. Retract the forks until the carry can is in the hopper and the Arm not Stowed indicator light turns green.

NOTE: The carry can will be upside down and horizontal inside the hopper.

4. Turn off the hydraulic pump to reduce the engine load between stops (see *Pump Switch* on page 57).

Exhaust Regeneration Process

To get more details about exhaust regeneration process, please refer to the chassis manufacturer's documentation.

NOTE: During the exhaust regeneration process, the operator must raise the arms until they rest on the rubber bump stops. Failure to do so will cause damage that are not covered by warranty.

Collecting Refuse

You should carefully follow the instructions below to ensure a safe and efficient collection. All the safety notions mentioned herein are of outmost importance and you should obey them at all times.

Danger! Be sure there is enough clearance to handle the container safely from the way up to the way down. Make sure nobody is near the vehicle.

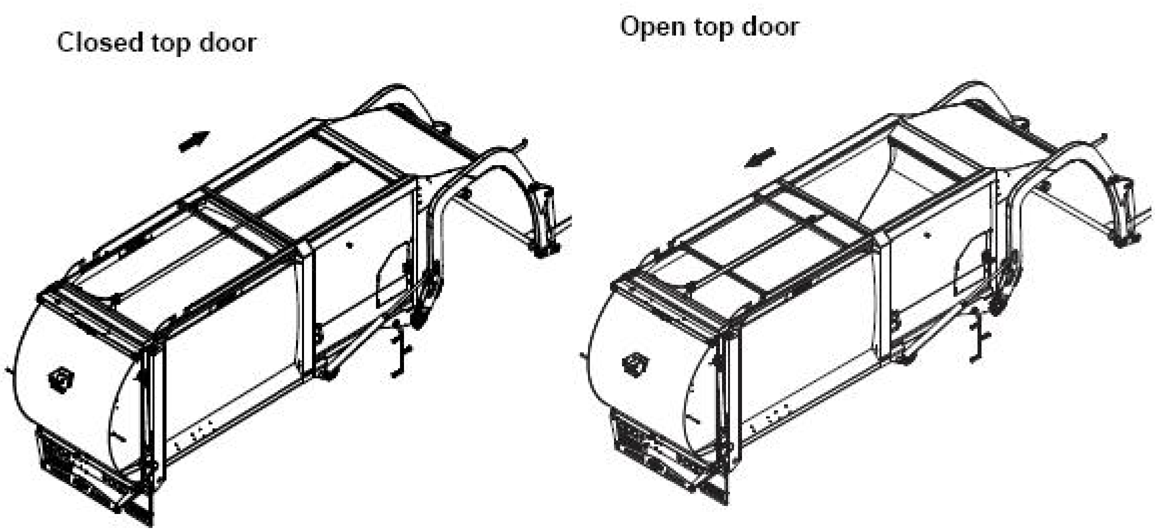
Planning your Route

It is important to plan your route in order to be efficient. Planning your route will shorten your collection time and prevent from being caught in a traffic jam.

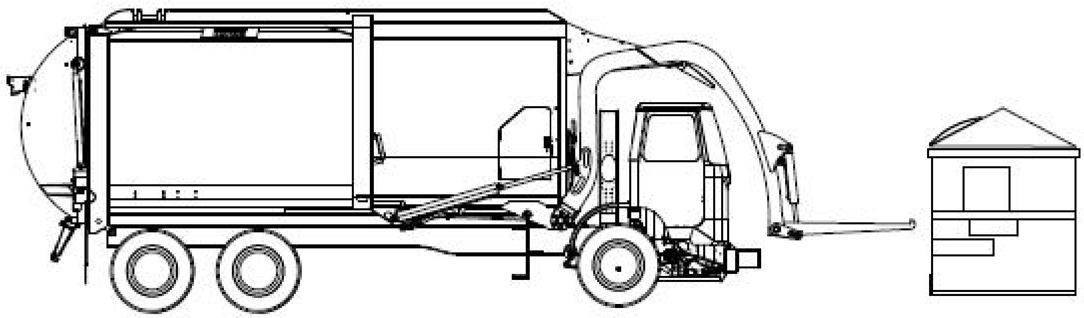
Commercial Collection

To collect refuse on commercial routes:

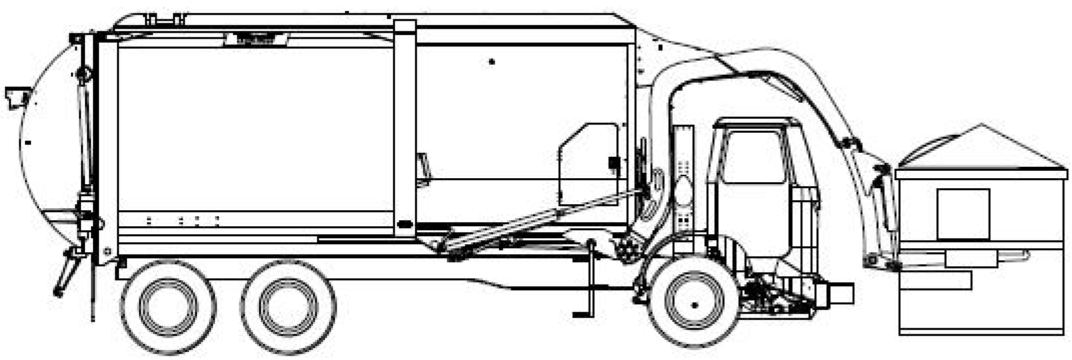
1. Turn on the hydraulic system (See *Pump Switch* on page 57) and fully open the top door (See *Top Door Switches (Roof Open/Roof Close)* on page 63).



2. Fully retract the packer blade (to its "home" position). The Packer Retracted indicator light on the console panel (See *Packer Retracted Indicator Light* on page 63) will turn green when the packer is fully retracted.
3. Position the front loader to approach the front of the container (see next illustration).



4. Adjust the arms and forks as required to securely engage the container.



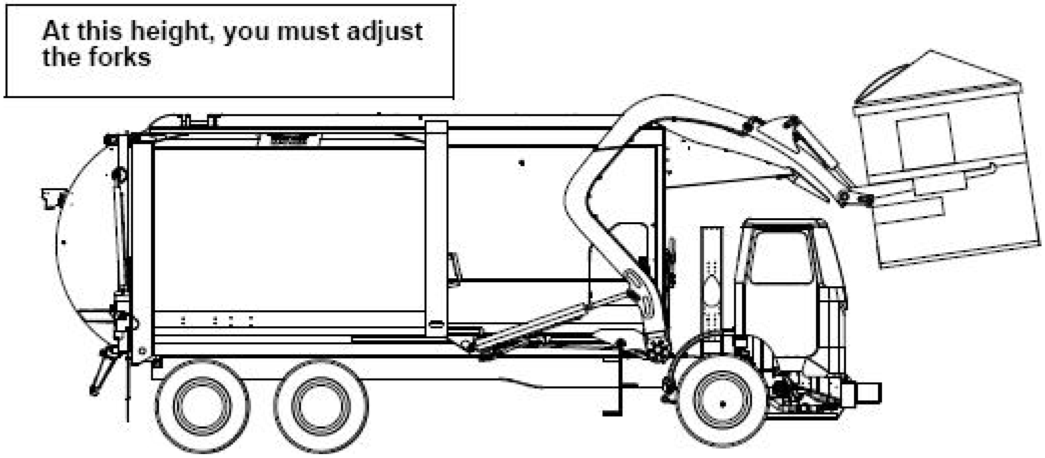
5. Put the transmission to neutral and apply the parking brake (See *Parking Brake* on page 69).
6. Raise the container while adjusting the forks to ensure the container clears the cab guard and canopy, and refuse does not spill before it reaches the hopper. Raise the container until the arms rest on the rubber bump stops.

IMPORTANT: Do not tip the container much more than 45 degrees. The container may slip off the forks and fall into the hopper.

NOTE: The forks may be cycled up and down in short movements to help empty the container.

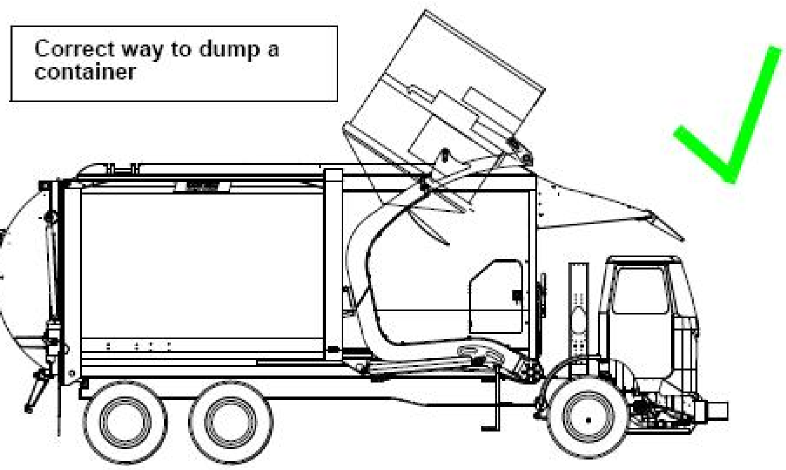
7. Adjust the forks to a 45-degree angle to dump the container into the hopper.

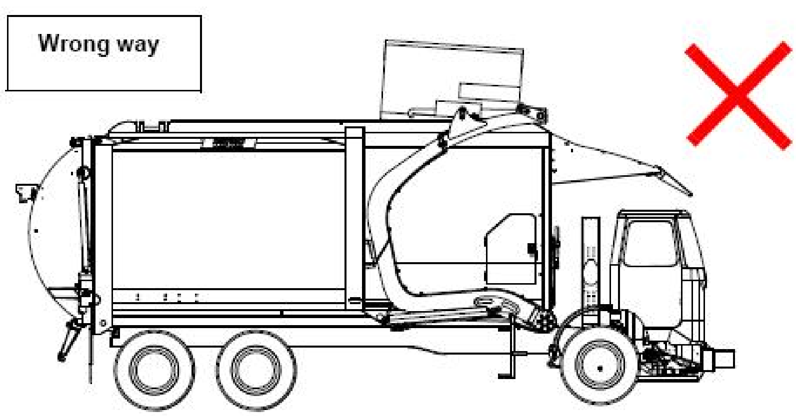
NOTE: While raising the arms and consequently the container, the operator should adjust the forks to make sure the container clears the cab and canopy, and it does not prematurely spill or dump refuse over the cab.



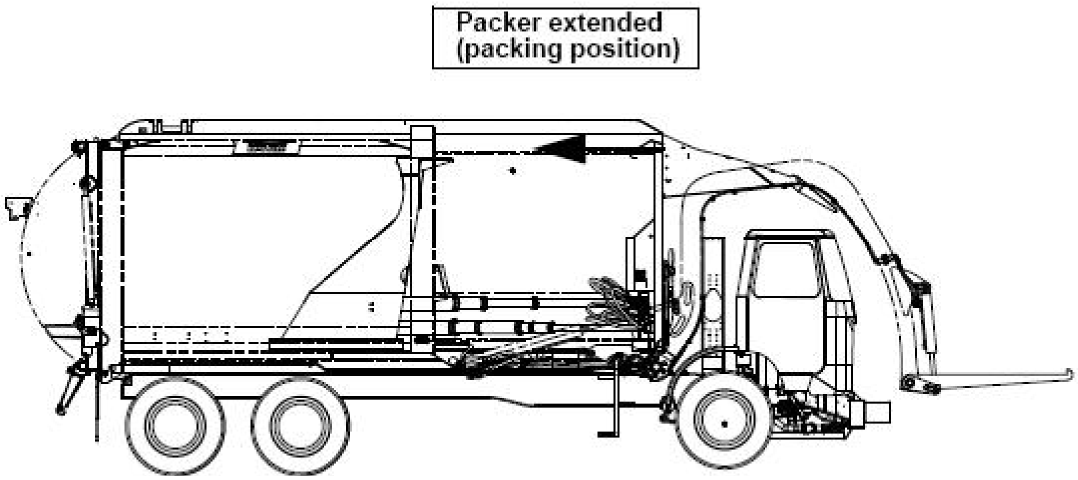
8. Tilt the container out of the hopper, lower the arms and return the container to the ground.

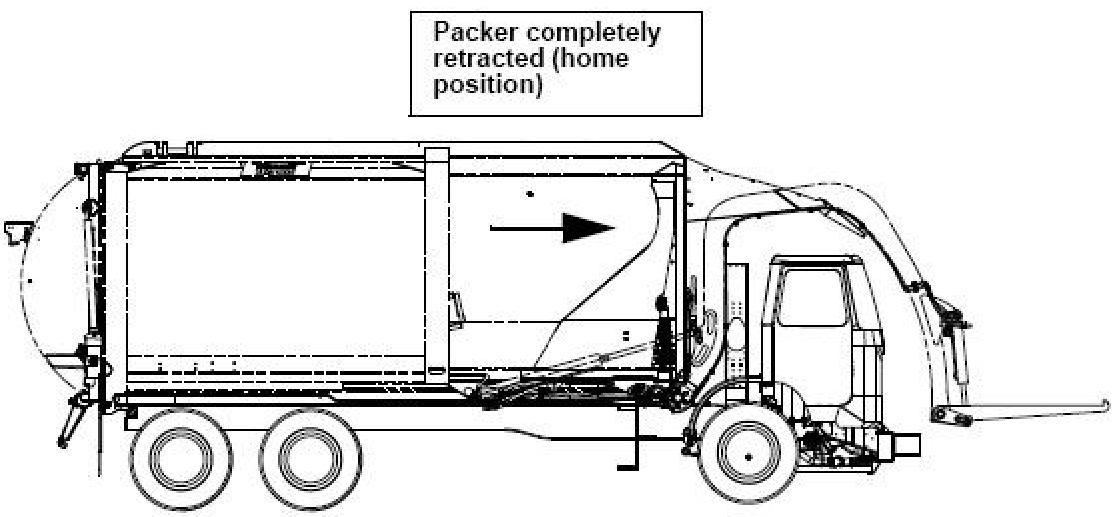
Danger! Be sure there is enough clearance to dump the container's contents into the hopper. Make sure nobody is near the vehicle during the operation.





NOTE: At this point you can press the Pack button on the control panel (See *Pack Push-Button (green)* on page 65) to move the packer blade off the front header and pack the recently dumped refuse into the body. The packer is allowed to pack during travelling.





Residential Collection

To collect refuse on residential routes:

1. Raise the carry can out of the hopper by operating the forks down joystick control.
2. Lower the arms and adjust the forks so the carry can will clear the canopy.

3. Position the carry can near the trash to be picked up and set the parking or work brake.

Danger! Be sure there is enough clearance to dump the carry can's contents. Ensure that nobody is near the vehicle during the dumping operation.

4. Fill the carry can with refuse. Refer to the carry can, cart tipper or automated arm (if equipped) manufacturer for more information.
5. Set the parking brake and lock the cart tipper(s) or automated arm (if equipped) in stored position.
6. Raise the carry can while adjusting the forks to ensure it clears the cab guard and canopy, and refuse does not spill before it reaches the hopper.
7. Adjust the forks to a 45-degree angle to dump the carry can's contents into the hopper.
8. Tilt the carry can out of the hopper and lower the arms and forks while making sure it does not come in contact with the canopy and cab guard on the way down.

Packing Refuse

When the hopper is full, the packer of the WITTKE™ helps you clear the hopper area by packing refuse into the body.

Packing refuse can be done in two ways:

- **Pressing the Pack button** — With the use of the Pack button on the control panel (see *Pack Push-Button (green)* on page 65), you can control the packer blade's sweep cycle. You can however stop the packer by pressing the Stop button (red) and retract it by pressing the Return button (yellow) at any point during the sweep cycle.
- **Using the Auto-Packing mode** — Working in this mode, the packer blade's sweep cycle is fully automated and is triggered by the lowering of the arms. You can, however, stop the packer by pressing the Stop button (red) or retract it by pressing the Return button (yellow) at any point during the sweep cycle (see *Auto-Packing Switch (optional)* on page 61).

NOTE: Use the Auto-Packing mode when time is of the essence and you are secure in allowing the STARLIGHT™ or SUPERDUTY™ control of the pack cycle. This mode provides you with a hands-off method of packing refuse while allowing you to focus on driving the front loader to the next stop.

IMPORTANT: Do not allow trash to fall behind the packer blade. this area must be kept clean to prevent damage to the hydraulic and electrical systems.

NOTE: It is recommended to perform this task while you move from one collection point to another.

Packing Refuse Using the Pack Button

The packer blade should be cycled every time the contents of a container (or a carry can) are dumped into the hopper.

To activate the packing cycle:

1. Turn on the hydraulic system (see *Pump Switch* on page 57).

NOTE: When the side access door is open (see Figure 4-1), the hydraulic pump is disabled. This door MUST therefore be closed properly in order for the hydraulic pump to be activated. The Hopper Door Open indicator light on the control panel must also be green-lighted (see *Hopper Door Open Indicator Light* on page 64).

2. Open the top door (see *Top Door Switches (Roof Open/Roof Close)* on page 63).

NOTE: A reinforced roof (optional on STARLIGHT™ units and standard on SUPERDUTY™ units) allows packing with the roof closed.

IMPORTANT: The top door is only designed to prevent refuse from escaping the hopper during transport. It should not be closed during packing, except if a reinforced roof is installed. Serious damage may result.

3. Press the Pack button to actuate the packer blade. See *Pack Push-Button (green)* on page 65.

   The packer should automatically complete a cycle then stop in its "home" position.

Packing Refuse Using the Auto-Packing Mode

To activate the packing cycle:

1. Turn on the hydraulic system (see *Pump Switch* on page 57).
2. Open the top door (see *Top Door Switches (Roof Open/Roof Close)* on page 63).
3. Turn on the Auto-Packing switch on the control panel (see *Auto-Packing Switch (optional)* on page 61).

NOTE: Lowering the arms activates the Auto-Packing cycle when the corresponding switch is activated (green-lighted).

4. Turn off the Auto-Packing switch when this feature is no longer needed.

Safety while Using the Packing System

Warning!

Always keep the warning lights and/or four-way flashers on when collecting refuse.

Danger!

Never attempt to reach inside the hopper area when either the packer blade or the arms are in motion. Severe injury or death may occur.

Warning!

Wear protective safety equipment (e.g. safety glasses and gloves) when you are working close to the hopper area.

Warning!

Always apply the lockout/tagout procedure before entering the hopper area. See *Locking Out and Tagging Out the Vehicle* on page 38

Packer Not Working?

If the packer does not cycle:

1. Read warning message on the display monitor. Refer to Table 1 in chapter 3 for a list of solutions.
2. Ensure the hydraulic system is engaged.

   Pump switch on the control panel must be green-lighted (see Figure 3-14).
3. Check the emergency red button (see Figure 3-24).

   Pull it up if it has been pushed down.
4. Press the yellow button to ensure the packer is completely retracted (see Figure 3-26).
5. Check around the packer for any obstruction preventing it from moving freely.

Warning!

Always apply the lockout/tagout procedure before entering the hopper area. See *Locking Out and Tagging Out the Vehicle* on page 38.

6. Check fuses and breakers in the console as well as the fuse located next to the battery box.
7. Report your findings to the maintenance personnel.

Unloading Refuse

Once the body of the WITTKE™ is full, drive the unit to the landfill or an appropriate area for unloading purposes.

Preparing to Unload Refuse

To prepare your WITTKE™ unit for unloading:

1. Find an appropriate dump location. The truck must be on solid, level ground. Adequate clearance must be provided to allow the opening of the tailgate.

Caution! Serious injury or mechanical damages could result if ground is unstable.

2. Straighten the wheels.
3. Set the parking brake.
4. Turn on the hydraulic pump (see *Pump Switch* on page 57).
5. Lower the arms completely.
6. Remove both tailgate safety pins (see Figure 2-13).

Unloading a WITTKE™ Unit

To unload refuse contained in a WITTKE™, do the following:

1. Press the Tailgate Open switch on the control panel (see Figure 3-15) and keep it pressed until the tailgate is fully open.

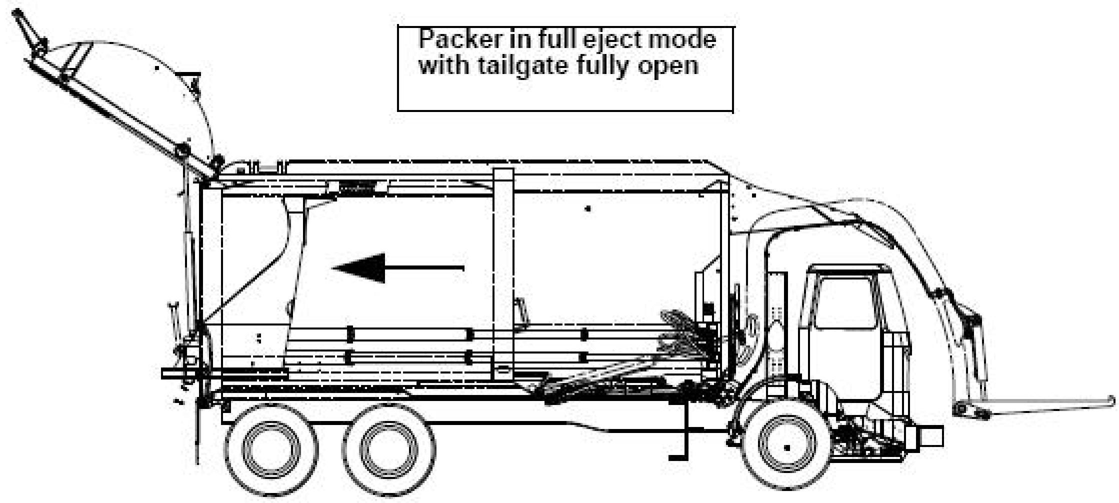
NOTE: As soon as the tailgate is unlocked and opened, an in-cab buzzer and a back-up alarm will sound. Also, during the upward movement of the tailgate, both the Tailgate Open switch and the Tailgate Close switch flash red. The Tailgate Open switch will turn green when the tailgate reaches its fully open position.

IMPORTANT: The tailgate must be fully open prior to unloading refuse.

2. Apply the foot brake and release the parking brake.

NOTE: The foot brake should be released while you unload, and allow the force of the moving load to push the unit forward. Always be alert of what is in front of the truck.

3. Press the green button on the control panel to fully extend the packer all the way through the body so that the refuse contained inside the body can be ejected completely. See *Pack Push-Button (green)* on page 65.



4. Drive the unit slightly forward as the contained refuse is unloaded.
5. Set the parking brake.
6. Cycle the packer blade a few short strokes to remove any remaining refuse.
7. Fully retract the packer.
8. Press the Tailgate Close switch on the control panel (see Figure 3-15) and keep it pressed until the tailgate is fully closed and locked.

NOTE: As soon as the tailgate is closed and locked, the in-cab buzzer and back-up alarm will stop sounding. Also, during the descending movement of the tailgate, both the Tailgate Open switch and the Tailgate Close switch flash red. The Tailgate Close switch will turn green when the tailgate reaches its fully closed and locked position.

9. Open the clean-out door (optional) to let any liquid waste drain away.
10. Close the clean-out door.

Cleaning of the WITTKE™

In order to ensure the continued good working condition of the WITTKE™ and its components, the unit has to be cleaned after each working day.

Preparing the Unit Before Departure

To prepare the WITTKE™ for the clean-up process, proceed this way:

1. Retract the packer blade until it is close to the beginning of the hopper area.
2. Close the tailgate until it is approximately 4 ft (1.2 m) from the tailgate seal.
3. Set the tailgate safety prop (see *Tailgate Safety Prop* on page 28).
4. Complete the lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 38).

5. Clean the tailgate seal area of debris.

Warning! Always use the tailgate safety prop while working under a raised tailgate. The safety prop should be used even if the tailgate is in fully raised position.

6. Reverse the lockout/tagout procedure.
7. Remove the tailgate safety prop (see *Tailgate Safety Prop* on page 28).
8. Close the tailgate completely (see *Tailgate Down Switch* on page 59).
9. Reinstall both tailgate safety pins.
10. Retract the packer blade to the “home” position.
11. Raise the arms and forks to the long-distance travel position.
12. Turn off the hydraulic pump (see *Pump Switch* on page 57).

Clean-Up Procedure

The area in front of the packer blade should be cleaned daily and as required. To do so, you can use the clean-out tools provided with the truck. These tools are located at the back of the packer (see Figure 4-9). Some trucks may also be equipped with a wash-out tank with hose and nozzle (optional) [see Figure 4-10].

Figure 4-9 Cleaning tools behind the packer



Figure 4-10 Wash-out tank



Warning! Test the side access door lockout before cleaning the hopper. See *Side Access Door Proximity Switch* on page 33.

Warning! Make sure the WITTKE™ is in an area where there is enough clearance to perform cleaning and maintenance.

To clean up a WITTKE™ unit, do the following:

1. Drive to an appropriate clean-out area.
2. Set the parking brake.
3. Press the Pack button on the control panel (see Figure 3-25).
4. Press the Stop button (see Figure 3-24) to stop the packer at the end of its packing stroke.
5. Open the top door (see *Top Door Switches (Roof Open/Roof Close)* on page 63) to have a better visibility of the hopper area.
6. Turn off the hydraulic pump.

   The hydraulic pump switch should be blue-lighted (see Figure 3-14).
7. Complete the lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 38).
8. Enter the hopper through the side access door.

NOTE: Some trucks are equipped with a streetside clean-out door, which can be used to clean the hopper (see Figure 4-11).

Figure 4-11 Optional clean-out door



9. Remove all refuse behind the packer blade including the rails and inside header.

NOTE: Pressurized water can be used if necessary.

10. Inspect the condition of the hopper area and record any problems or concerns in a vehicle condition report.
11. Once the cleaning is done, exit the hopper. Close and secure the side access door.
12. Reverse the lockout/tagout procedure (see *Locking Out and Tagging Out the Vehicle* on page 38).

Canopy Sweeper (optional)

Fixed to the fork torque tube and made of rubber, the optional canopy sweeper (see Figure 4-12) is used to remove debris that may fall onto the canopy from a container on its way up. The debris that remains on the canopy can be swept by a second lifting of the arms after the empty container has been put back on the ground and released. The forks must be fully retracted in order to sweep the canopy properly.

Figure 4-12 Canopy sweeper



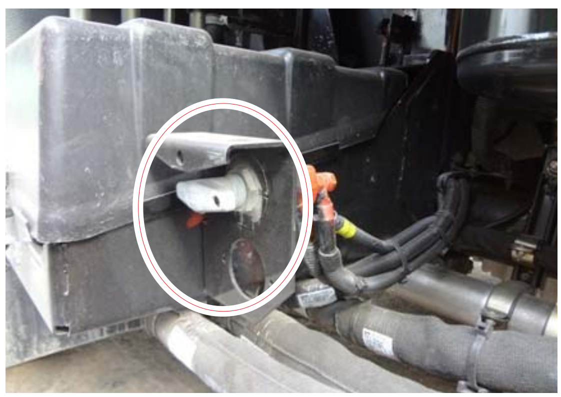
Shut-Down Procedure

To shut down your WITTKE™ unit, do the following:

1. Park the vehicle on solid, level ground.
2. Set the parking brake.
3. Ensure all hydraulic cylinders are collapsed (arms up, forks down, tailgate closed, top door closed, packer blade in “home” position).
4. Turn off the optional auto neutral feature, if you were using the right-hand side driving position.
5. Turn off the hydraulic pump.

   The pump switch on the control panel will turn blue, indicating that the hydraulic system is disabled.
6. Turn off all lights (work lights, strobe light, etc.).
7. Shut the unit off following the chassis manufacturer’s recommendations.
8. Drain air from all air tanks.
9. Turn off the master switch (see Figure 4-13).

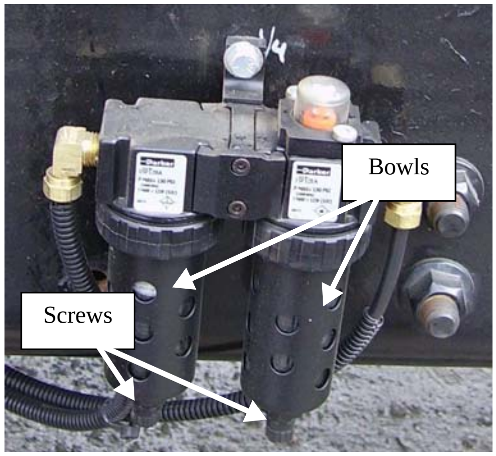
Figure 4-13 Master switch



Water Trap Bleed

Usually located on the right-hand side truck frame, near mid-section, the water trap bleed (see Figure 4-14) must be drained at the end of every working day. Just slacken off both water trap bleed screws under the bowls and catch the water and oil that flow out with a rag. The water trap helps keep moisture out of the air system.

Figure 4-14 Water trap bleed



Emergency Actions

Hydraulic Oil Spill

In case of hydraulic spill, do the following:

1. Press the emergency red button (see Figure 3-24).
2. Turn off the pump switch (see Figure 3-14).
   Pump switch should be blue-lighted.
3. Turn off the truck engine.
4. Close the main valve on the hydraulic tank (see Figure 2-21).
5. Carefully inspect and find the cause of the leak.
6. Call the maintenance facility and report your findings.
7. If the leak cannot be repaired on site, and the vehicle cannot be towed, remove the pump drive shaft before restarting the engine.
8. When it is time to restart the pump after repair, ensure that the valve on the hydraulic tank (see Figure 2-21) is fully open and that there is sufficient oil in the hydraulic tank.

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(24 hours)

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